TEMPEST-TOSSED: A LEARNING JOURNEY IN HIGH TECH

by

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ABSTRACT

This thesis explores thoughts, observations and theoretical research associated with work-related career shifts, adult learning and education. In contemporary society, work-related values are changing. Workers need to be flexible, adaptive and in terms of skills, up-to-date. Since an individual may experience a variety of career shifts during the course of her working adult life, learning and education are essential. But how should work-related learning occur and what avenues are available for those who require it? Workplace learning occurs in many forms and settings, and since learning is a personal process, it is difficult to ascertain ideal learning situations for each employee. The purpose of this study was to reflect on and analyze the just-in-time learning experience of one individual who underwent a career shift in the high tech industry.

This thesis recounts the learning journey of the author, a high school English teacher and graduate student, who embarked on a new career as an education consultant. It is a multifaceted and multidisciplinary narrative that explores three distinct areas: the narrative and personal observations central to the author’s learning and work experience; theoretical perspectives relating to the contemporary workplace and adult learning; the characters, themes and metaphors from The Tempest that illuminate the author’s learning journey.

Principles of adult education and theory pertaining to workplace and other settings for learning, along with characters from The Tempest, are invoked to deepen the author’s understanding of what occurred during her high tech adventure. The author highlights contradictions between corporate jargon and educational theory, and dwells on
dilemmas problematic for protean workers and others destined for corporate education and training. Concepts relating to knowledge management, organizational learning and e-learning are challenged in conjunction with issues of power and knowledge.

Caught between the demands of the continuously changing corporate world and protected realm of academia, the narrator is forced to combat a storm. Her survival is testimony to her capacity to learn, adapt and rely on previous skills garnered from years as a graduate student and English teacher. Survival does not come easy—there are fumbles, frustrations, and follies along the way.

This narrative provides a personal account of what it means to learn and work in the high tech industry. Although this is one person's story, the insights developed and theory invoked have utility that extends to other workers and settings.
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Act I Tempest-Tossed

I'll drain him dry as hay:
Sleep shall neither night nor day
Hang upon his pent-house lid;
He shall live a man forbid.
Weary se'nnights nine times nine
Shall he dwindle, peak and pine:
Though his bark cannot be lost,
Yet it shall be tempest-tossed.

Macbeth I.iii.14-25

When heading into a storm at sea experts suggest there are several things to do in preparation. First, batten down hatches and try to keep the boat waterproof as possible. Second, take down sails. Riding against a storm is futile and depending on severity, one may be thrown off course. Tossing sea anchors off the stern might keep the boat steady and prevent one from veering too far, but the best advice is to ride it out. Since some storms are capable of destroying a vessel, it makes sense to brace oneself and prepare for the worst.

Life is full of storms. I have endured several squalls that were not real storms at all, just figurative ones. I felt cast adrift and forced to batten down hatches, throw sea anchors overboard and ride. Embarking on a new career was one such storm. For me,
learning and working in the high tech industry felt like being caught in a raging tempest. Gales swept me in opposing directions and chance of survival seemed slim.

This thesis is the story of a work-related storm. It's about me, a former high school English teacher and graduate student, who, tired of teaching and studying at university, seeks a new career. I secure a job as an education consultant and technical trainer for a high tech company and, having neither worked in the private sector nor high tech, embark on an expedition that redefines my way of thinking. The narrative that follows focuses on three conceptual elements—shown here as overlapping circles. It chronicles my experiences and relates them to characters and themes from Shakespeare's *The Tempest*, and to academic literature pertaining to learning for work.

![Figure 1. Domains of Enquiry Pertaining to Life and Work in a High Tech Company.](image)

**Reflections** concern the narrative and personal observations central to my work experience. Its purpose is to provide a space in which reflection on the other two circles
occurs. Reflections assesses the fitness of academic research in conjunction with my experiences and compares my thoughts and feelings to characters and themes in The Tempest.

_Academic elements involve theoretical research pertaining to significant lines of inquiry developed in adjoining circles. This realm of investigation entails consideration of contemporary work-related issues, adult learning, and contrasts between teaching high school and teaching adults. It also includes literary criticism relevant to The Tempest._

_The Tempest is included in my thesis because of my close identification with Prospero and his daughter, Miranda. Although I do not profess to have the same sweeping powers as the exiled Duke, I share issues and obstacles common to both characters. I identify with Miranda's wide-eyed innocence and Prospero's roles as teacher and exiled castaway. I also relate to their ability to endure storms. The Tempest helps develop the metaphor of lost at sea. It is the story of shipwrecks, castaways, elements of vengeance, treachery and new beginnings. It is also an allegory rife with themes of knowledge, power politics, and education. Characters from The Tempest and these themes meander through my reflections and stacks of academic literature._

_This thesis is the combination of knowledge from three fronts, colliding to create the perfect storm. Storms fling boats off course and inevitably this journey swerves through non-traditional and unmapped waters. The reflections, observations, and research that follow are written in narrative style. Narrative is the method best suited to document this journey because its fluidity allows freedom to explore issues creatively. It is much like Ariel—a free spirit with hints of male and female, representative of_
alternate ways of viewing the world, connected to the tangible lives of castaways on the island and worlds of make believe.

Font is important in this thesis. It is used to help the reader detect shifts between lines of inquiry, tone and approach. My reflections and allusions to The Tempest are presented in this italicized text: non-traditional, dynamic, and slightly askew. Academic perspectives and lines of inquiry are set in non-italicized text. Set against each other they often overlap. Regardless, traditional font is used to display traditional academic text. It serves as a navigational tool, a sextant for my research.

Setting Sail

When embarking on a new career path, a squall advances quickly. Personal and professional lives are flung to the waves, rain stings cheeks and wind numbs hands. My story does not begin “in media res,” like The Tempest. I propose to go further upstream or up-storm, when I was seemingly content teaching high school English and studying graduate education courses.

After eight years of teaching at a boarding school, my reasons for heading to graduate school were many; I was eager for a challenge, a re-test of academic waters and a promise of excitement that learning always brings. Graduate school delivered on all accounts. Learning was smooth and constant, support networks reliable and steady. I enjoyed my course work thoroughly. It was when thesis-writing time arrived that clouds started to form. Perhaps I should have looked up. But when my friend, Tom, asked me to work for his high tech company, I leapt at the opportunity. Heading back to teaching so soon seemed too easy. The learning expedition needed to continue.
Tom was a senior partner in a high tech company and working on an implementation project in the Pacific Northwest. The National Centre for Postsecondary Improvement's National Employers Survey defines a high tech company as one in which a high proportion of the company's front line staff use computers to do their jobs. It employs a high proportion of computer technicians and has a high proportion of equipment less than one year old (Zemsky & Eisenstein, 2000). Tom's company specialized in operations management. The company's expertise was implementing computer systems and business solutions for large organizations. These implemented systems helped manage resources, inventory, workflow and equipment. His company had approximately 25 fulltime employees and a wealth of experience working on projects of this nature.

Tom's offer came while his company was developing software and business practices for a city water department. Although city officials had been consulted, few knew how to use the software. Instructional material needed to be written and people trained. Ideally high tech companies have technical trainers and instructional designers. Tom's employees had computer science and business backgrounds, but were not comfortable presenting and teaching. He wanted to hire a teacher as an education consultant. After deliberating with his project manager, Rick, it was decided that an instructor with presentation skills and teaching experience at a multitude of levels might be suitable for the position. The downside was that a teacher would not have technical knowledge, language and tools of the industry. Rick and Tom were unsure which would prove more important.
My working assignment was to teach and design educational material. I was responsible for assembling information, organizing and writing an instructional manual. I was also expected to teach the material to 200 company employees while mentoring others who would eventually do the same. I was to ‘train-the-trainer,’ and needed to learn a multitude of things to tackle each of these tasks.

Central questions

The experiment of the summer was to test my professional skills and assess whether they were adaptable to the high tech industry. This meant determining which relevant professional skills I possessed and identifying which I needed. Recognizing and identifying skills gaps was difficult, as it is tough to know what one doesn’t know. In reflecting upon my experiences there were two central questions:

- From a personal and professional perspective, was I fit to work in the high tech industry?
- What professional skills would I require to be a successful education consultant in the high tech industry?

My approach to my newfound career was grounded in graduate school education and experience teaching at a boarding school. My understanding of traditional forms of education and roles of teacher and learner were just that—traditional and, in many respects, dated. Much of what I learned from the high tech industry challenged the legitimacy of institutions within which I had worked and studied. This was a journey that would reinvent the wheelhouse.

There was much to learn from my experiences working in a competitive and shark-infested industry. The corporate world was new and dangerous. I knew nothing
about working in this Brave New World of high tech. I knew nothing of
implementations, roles, management and nuances associated with a large project. This
would quickly change.

**Brave New World**

*O wonder!*

*How many goodly creatures are there here!*

*How beauteous mankind is! O brave new world*

*That has such people in't!*

*The Tempest* V.i.182-185

*The Tempest* begins with a storm, but not the one that shipwrecked Miranda and
Prospero years ago. The tempest in Act I is planned by Prospero and conjured by Ariel
to lure those responsible for Prospero’s banishment to the island. Prospero and
Miranda had already been living on the island for years. Prospero had his books for
comfort, and Caliban and Ariel as slaves, while Miranda was raised in isolation. She
was too young to understand the political underhandedness that precipitated her
father’s departure, and too naïve to realize her father’s preoccupation with reading
philosophy and magic rather than attending to affairs of state had caused his downfall.
Prospero had erroneously placed Milan’s economy and politics into the hands of his
brother, Alonso, who eventually wielded power and banished his brother. Near the
beginning of the play Prospero relays these events to Miranda and sets the stage for his
revengeful plot. Those shipwrecked on the island in scene one are the focus of
Prospero’s scheme. Lessons and folly await each.

Miranda’s famous lines quoted at the beginning of this section have spawned the
works of anti-Utopian novelists. At this point in Act V, she has pronounced her love for
Ferdinand and on seeing the rest of his courtiers, is astonished. Her exclamation expresses the wonder and delight of seeing so many finely dressed, civilized Europeans. The more sober minded and mature Prospero comments after her, “Tis new to thee.” These four words are wonderfully pregnant. In them, he acknowledges his awareness of the nature and complexity of human beings, and negates Miranda’s exuberance (Johnston, 1999). The Brave New World Prospero knows is one where magic does not work. It is a Machiavellian world of the court, where plotting against others, even against family for the sake of political power, is commonplace. In this world, if leaders take their minds off political realities for long they find themselves in boats with books heading to unknown exiles.

The Brave New World at the dawn of the twenty-first century is not quite what Huxley envisioned or Prospero knew. It is dedicated to technological advancement, which in turn has changed the way citizens live, work and do business. It has also changed the way they learn. If Miranda were to arrive in today’s world to marry Ferdinand and carry on her father’s legacy, she would have to absorb a great deal of information quickly. Living and working at the dawn of the new century means dealing with continuous change. Miranda, like me, would have her hands full.

Contemporary work

The New World is swamped with technology. Dot-com and e-business splash across headlines of newspapers and magazines, and television commercials keep the pace by accelerating the speed of high tech advertisements to fast forward. Information highways, products and new technologies have seemingly moved mountains and reshaped infrastructure. Competition is fierce and the pace of change dizzying.
Technology has become an integral part of society; expenditures for it in the United States have grown from five percent of total capital spending in 1970 to nearly 50 percent in 1999 (Izzo & Withers, 2000). In workplaces, there is generally one personal computer for every 1.3 employees, and at home, more than 60 percent of households are expected to have personal computers by 2003 (Izzo & Withers, 2000). There were fourteen million users on the Internet in 1995; 320 million are expected by 2002.

Technological innovations have brought faster product cycles, changing work processes, and a smaller, more skilled and internationally competitive workforce (Izzo & Withers, 2000). New technologies have profoundly changed the production processes in manufacturing industries as well as the nature and mode of delivery of most services. Many jobs and job skills have become obsolete, while entirely new occupational categories requiring different qualifications are being created (Fisher, Rubenson, & Schuetze, 1994). The world economy is subject to corporate capitalism, which knows no boundaries and is becoming increasingly globalized. Globalization is defined as: “A social process in which the constraints of geography on social and cultural arrangements recede and in which people become increasingly aware that they are receding” (Waters, 1995, p. 3). Technology seems to have made the world smaller and economies more integrated.

Work-related values have changed. Work is viewed as more uncertain, just-in-time, and knowledge-based: “Graduates are entering a workplace characterized by change. Public, private, and not-for-profit organizations are downsizing, rightsizing, restructuring, removing layers of bureaucracy, revolutionizing work process, developing team approaches, and empowering workers” (Evers, Rush, & Bedrow, 1998, p. 3). These
changes have occurred parallel to, and face a process of globalization, whereby national economies are increasingly interrelated and economically interdependent (Fisher, Rubenson, & Schuetze, 1994). As a result, governments are coming under pressure to develop workers' skills. The OECD states that education is an essential response to changing economies that require rapidly changing knowledge and skills (Marginson, 1997). Education is seen as a vehicle in preparing people to manage change, continuously develop and learn, make entrepreneurial decisions, and increase creativity and productivity (Hadley, 1996; Marginson, 1997). The emergence of the knowledge-based economy has meant links between education and the economy have taken on a new sense of urgency and the general thesis is that the more advanced an economy is, the greater the returns to investment in education (Green, 1997).

Human capital theorists argue Canada needs to continue to develop the knowledge of its workforce in order to compete on a global level and increase its rate of economic return (Marginson, 1997). According to Livingstone (1997), Canadians are engaging in learning activities in record numbers, yet he states that many are not using their skills to full capacity. There is considerable disagreement over the skill levels required by the new economy. Some argue that high level technical professional skills will be in great demand because the trend toward enhancing productivity through technological change will reduce repetitive and physical work (Fisher, Rubenson, & Schuetze, 1994). Others argue that technological change inevitably leads to work simplification, fragmentation and de-skilling, and thus most jobs will not require high skill levels (Fisher, Rubenson, & Schuetze, 1994). Both views provide insight into the
current situation. New technologies have made entire categories of jobs redundant, and at the same time prompted an upgrading of general skill requirements.

There is a growing emphasis on the need for generic or employability skills. It is believed these will help workers become more flexible and adaptable, and thus more able to keep pace with the changing nature of work (Rousseau & Tijoriwala, 1998). Universities in industrialized countries tend to place less emphasis on discipline-based education and more on students acquiring competencies to meet the general requirements of various industries (Fisher, Rubenson, & Schuetze, 1994). These employability skills include attributes such as creativity, problem solving, communication, and the ability to work in teams (Tucker, 1996).

Whether I possessed those general skills was questionable when I embarked on my high tech voyage, but as an experienced teacher, chances were I possessed at least a few skills. But what exactly are skills? Gaskell (1992) states they are socially constructed: “Skill is not a technical property of a job that can be empirically determined by careful study, but an assessment of value that is rooted in politics: in power, in culture and in economic position” (p. 113). She argues that skill differences are born out of power relations and serve to give power the legitimacy it would not otherwise have. Are questions related to the “right” skills really about skills, power or both?

Blackmore (1992) contends skills are socially constructed and should not be viewed as something inherent to the individual. Skills are constructed to serve particular people and groups. Gaskell (1992) states:

our notions of what constitutes skilled work are socially constructed through political processes that have been played out in the workplace as well as educational institutions. Those political processes are affected by class as well as by
gender, and need to be brought back into focus in order to get away from the
reification of a notion of ‘skills’ that, if it is taken as presently constituted, serves to
legitimize existing differences in income and power rather than to explain them. (p. 120)

Regardless of the political discussion that permeates talk about skills, scholars suggest there is a skills gap between the needs of employers and labour force participants (Tucker, 1996). Perhaps this is what I could relate to given my situation. Tom and Rick believed teaching and a university education had prepared me for what they had to offer, but others might suggest the skills gap stems from a disparity between what skills the education system is providing and those needed in a high-performance workplace. According to Schuetze (1992), the general qualities that industry believes are required from the workforce involved with computer-based systems or equipment are:

- the capability for analytical thinking applied to different processes of work;
- a sense of responsibility and a capacity for autonomous work;
- the ability to link technical, economic and social considerations in the appreciation of equipment and working methods; and
- a planned and methodical approach to work (pp. 42-43).

Perhaps I did possess a few of these qualities, but there was little doubt that I would need just-in-time training. And my situation was not unique with respect to many other Canadian workers.

The new career contract

In Canada’s rapidly changing work world professionals are obliged to update continuously their skills and qualifications. The contemporary high-speed work environment demands competencies of identity development and heightened adaptability, which Hall and Mirvis (1995) call “meta-skills,” or skills for learning how to learn. There
has been a shift in traditional values and expectations relating to the work world. Hall and Mirvis (1995) dub it “the new career contract.” The contract is characterized by a move from the organizational to the protean career, based on self-direction in the pursuit of psychological success in one’s work (Hall, 1976, 1986a):

The protean career is a process which the person, not the organization, is managing. It consists of all the person’s varied experiences in education, training, work in several organizations, changes in occupational field, etc. The protean career is not what happens to the person in any one organization. The protean person’s own personal career choices and search for fulfillment are the unifying or integrative elements in his or her life. The criterion for success is internal (psychological success), not external.

In short, the protean career is shaped more by the individual than by the organization and may by redirected from time to time to meet the needs of the person. (p. 201)

Assumptions associated with a traditional organizational career, where people work in a firm until retirement and where seniority and maturity are valued and respected qualities, are diminishing: “The shift to the protean career means decoupling the concept of career from a connection to any one organization and even from its exclusive association with lifelong paid employment” (Hall & Mirvis, 1995). Instead of more traditional concepts of career as a linear progression of upward moves or as a fairly predictable series of discrete stages or even as a regular pattern that might be unique to each individual (Driver, 1994), the protean concept encompasses a more flexible, mobile career course, with peaks and valleys, left turns, moves from one line of work to another (Hall & Mirvis, 1995).

My situation was an example of the shift towards a new career contract. I was defining my identity in the workforce. One of the keys to understanding the new contract is that employee needs and concerns change over the course of the career, as do skill demands of the fields in which the employee works (Quinn, 1992). Continuous learning
is required for success, thus learning how to learn is a core career competency: “In other words, we should forget about clinging desperately to one job, one company, or one career path. What matters now is having the competitive skills required to find work when we need it, wherever we can find it” (Waterman, Waterman & Collard, 1994, p. 207).

The amount of learning that would be necessary during my career shift was not beyond contemporary expectations for business and high tech. People’s careers have become a series of “mini-stages” (or short-cycle learning stages) of exploration-trial-mastery-exit as they move in and out of various product areas, technologies, functions, organizations, and other work environments (Hall & Mirvis, 1995). Since an adult may anticipate as many as five “mini-stages” during her professional life (Gondles, 1999), training and professional development are perpetual. My career shift was not extraordinary, just new to me. I was raised and educated to think “working life” meant a formal education, career choice, training and learning on the job. This was dated. I was re-entering a new world with old-world values. Perhaps my situation was not dissimilar to Miranda’s.

Miranda and I would have a lot to learn about what it was like to live in a new city—a bustling, business-centred, and work-filled community. Prospero was right. He knew life must be lived in the real world, in Milan or Naples, and Miranda could not find fulfillment on the island. I could not hide on my island either—as sheltered, safe and isolated as my school community was. Realities of life must be encountered and dealt with as effectively as possible.
Changing jobs and gears meant the needle on my learning curve would be pushing red. When I started work, Tom, in typical high tech fashion, told me he needed me to get busy as soon as possible. Training was scheduled to start in six weeks and I was hired just-in-time.

As a graduate student, my experiences as learner were situated within a defined, stylized and predictable realm. But now the necessity of learning was less defined, less formalized, and more immediate. It was part of a continuous process that working professionals face in the contemporary work world.

Adult learning

As the speed of change in society increases, so must people feel compelled to keep learning: “This is no new phenomenon; human beings have probably always had the capacity to learn throughout their lives, but in former times there was perhaps less need to do so than there is in this present age” (Jarvis, 1995, p.1). The global economy coupled with new technological advancement mean adults must continue to learn in order to function at work, home, and in their communities.

Learning is defined as change in an individual’s dispositions or capabilities, which can be observed in the form of permanent behavioural change (Boshier, 1996). Education describes the process of managing external conditions which facilitate this internal change (Boshier, 1996). Semantic confusion between these terms has conceptual implications (Brookfield, 1984). In my situation, differences between the two were explicit. I would scale stacks of learning in preparing to provide education or manage external conditions for other learners.
People learn and acquire culture through socialization and education. In societies where rates of social change are slow, such as pre-industrial Europe or primitive tribes, it is feasible for community members to acquire an adequate amount of cultural knowledge in childhood (Jarvis, 1995). In a society such as Prospero’s Italy, only the elite would have continued to study in adulthood. Others would have considered their education complete. Perhaps that’s why Prospero’s obsession with learning and books was considered trivial and inconsequential to Milan’s day-to-day affairs. Was his behaviour elitist—attributable to the likes of Plato’s philosopher-kings? Critics suggest The Tempest grows out of The Republic and reflects upon the issue of philosopher-kings (Cantor, 1980). Although it raises fundamental questions of classical political thought and rule of the wise, readers will not find shadows on the walls of Caliban’s cave in Prospero’s Republic. They will, however, find rule by wise and continuous learning by all who inhabit the isle.

Education helps prepare people deal with social and technological changes. Knowles (1975) suggests society relies too heavily on education as a process for teaching and that individuals need to learn how to learn without being taught. If the purpose of education is transmitting “what is known in the world,” it is unrealistic to expect individuals, who live in a society within which the half-life of many facts is ten years or less, to cope. It is impossible to know “what’s known” when knowledge is in a constant state of flux. Learning must be continuous.
Theoretical perspectives

Two primary perspectives frame research in adult learning: individual and contextual. The individual paradigm assumes learning happens internally, primarily inside our heads—the outside environment is given little attention. This perspective assumes people construct set principles and competencies that enable effective learning, regardless of background or current situation (Merriam & Caffarella, 1999). The contextual perspective takes into account the interactive nature and structural aspects of learning grounded in a sociological framework. Learning processes are inseparable from learning situations. Within this perspective, knowledge and learning processes are viewed as “a product of the activity, context and culture in which it is developed and used” (Brown, Collins, & Duguid, 1989, p. 32). Learning for everyday living happens only “among people acting in culturally organized settings” (Wilson, 1993, p. 76). Physical and social experiences in which learners find themselves, and the tools they use in those experiences, are key to the learning process (Merriam & Caffarella, 1999).

The assumption that learning and knowing are primarily cultural phenomena raises social and political issues related to knowledge and power. Those studying adult learning from this perspective question whose interests are served and who has control over learning processes and outcomes. Assumptions about the nature of knowledge—including what counts as knowledge, where it is located, and how it is acquired—are also challenged. Fundamental to these questions are themes of power and oppression. Are
those who hold power operating in the best interests of those being educated? Other issues worthy of consideration are race, class, gender and ethnicity.

Scholars acknowledge the importance of both individual and contextual aspects of adult learning. Jarvis (1995) suggests learning is more than a psychological process that happens in isolation from the outside world. Learning is intimately related to and affected by the learner’s world, and people are moulded by their interactions with society. Tennant and Pogson (1995) stress “the nature, timing, and processes of development will vary according to the experiences and opportunities of individuals and the circumstances in their lives” (p 197).

Since opportunities and life experience feature prominently in adult learning, today’s economic climate equates to change, continuing education and professional development for the adult worker. Adult education is big business in North America (Izzo & Withers, 2000). Education and learning in the marketplace translate to increased economic rewards for both employers and employees. There are many reasons companies feel compelled to provide corporate education and training for their employees. In sum, training equates to higher staff retention and increased profits (Izzo & Withers, 2000). Higher employee retention means improved worker performance and commitment to the company, thereby lowering costs associated with turnover (Cummings & Park, 1992). It’s all about money.

Competitive relations of a marketplace economy framed the learning I engaged in during my career shift. But I’ll leave that discussion for later. Literature describing learning in the Brave New World established several significant matters. First, technological advancement has modified the ways humans work and businesses are run.
Career shifts are increasingly commonplace which means a greater number of education and training programs. Training and learning are viewed as essential components of working life. Learning is a mandatory ingredient of socialization and, as values and norms of societies and cultures evolve, individuals must adapt or hazard feelings of alienation.

Prospero met this fate. In his day the economic and social climate of Milan was different, but several values behind the issues are similar. Technological change, and political and economic competition demand leaders to pay attention to the current state of affairs. Within any society, there is always new knowledge, values, beliefs, and skills for learners to acquire. This may result in having to 'unlearn' older knowledge or skills in order to maintain a harmonious relationship with cultural milieu (Jarvis, 1995). If leaders choose not to keep abreast, they sink. But what about graduate students?

The purpose of Act II, Setting Sail, is to assess how well or ill-equipped this graduate student was for a shift in career. For many people, changing careers means reassessing skills and learning new ones. Act II addresses avenues available for work-related training and the extent to which these avenues have grown.
Act II  At sea

In few, they hurried us aboard a bark;
Bore us some leagues to sea, where they prepared
A rotten carcass of a butt, not rigged,
Nor tackle, sail, nor mast; the very rats
Instinctively have quit it. There they hoist us,
To cry to th’ sea that roared to us; to sigh
to th’ winds, whose pity, sighing back again,
Did us but loving wrong.

The Tempest I.ii.144-151

My new job meant venturing to a new city and country. As an official member of
the Canadian brain drain, I headed towards Project Island with a work visa, empty
briefcase and strict deadlines. The Centre for Immigration Studies reports that since
1970, 601,000 people from Canada have emigrated to the United States (Stornoway,
2000). I had little time for patriotic guilt and nostalgia for a decent newspaper and
CBC Radio One. My flag and sail were both lowered, ready to confront the storm.

Upon arrival, the first task was getting familiar with the project and key players.
In a sparse, makeshift office next to an automotive repair shop there were thirteen other
staff members: project manager, Rick, project co-ordinator, Tracy, nine business
analysts, and two systems analysts. The team had been working on the project since
January and it was early May. The software implementation was set to “Go Live”
midnight, July 1st. Go Live is a term given to the specific date and time a software
program is scheduled to commence officially. Real data are entered; users use. This is the first round of implementation, which potentially leads to fallout for project teams. Transitions associated with Go Live dates must run smoothly—they are the culmination of months and years of work. Tactically, the team had chosen a date smack in the centre of a holiday weekend, meaning most users would be away on vacation. Fallout would be secondary to Independence Day picnics and hopefully fraught with less fireworks.

I am not sure of the precise day Prospero was cast out to sea, but assuredly his Go Live date began shortly before the other castaways were shipwrecked. The experiment was set in motion and Prospero and Ariel were ready to perform. Caliban and Miranda, although already living on the island, were unaware of the events about to take place. Prospero was counting on these stakeholders to be key players with respect to their relations with fellow castaways. Just as Tom’s company could not anticipate how end-users would deal with mandatory software implementations, Prospero has no idea how his end users are going to react to the implementation of his experiment.

The Go Live concept meant little to me when I first arrived. I was a new hand, scared and nervous, with little ideological context and no framework peg on which to hang my sailor’s cap. In retrospect, it might have been wise to take stock of the relevant professional skills I possessed as a teacher and student, and simultaneously to compile a wish list of those I’d need.

Taking Stock

It felt odd to be in an environment knowing little about expectations and how the industry “worked.” It seemed silly to ask so I kept my mouth shut, absorbing as much as
possible. I learned later that's what literature tells consultants to do—watch and blend (Brody, 1987). I was eager not to draw attention to myself, yet at the same time had to act as a professional, an education consultant. Being a professional meant being armed with certain skills that would prove crucial; unfortunately, there were many things I had yet to learn.

My skills

I have never attempted to list skills gleaned as a former high school teacher and graduate student. But if I had to take stock, they would include the following:

- Ability to present new material
- Interpersonal skills
- Ability to teach to a diverse audience
- Ability to teach technical skills
- Ability to set curriculum
- Knowledge of evaluation — both student and self
- Writing and research skills
- Organizational skills
- Goal setting skills

I was to devise a training strategy, create training material, organize classes, and teach. On the surface it seems many skills I possessed would be applicable to the job description to a certain degree. But missing pieces were integral components.
Wish list

There were four large gaps in my knowledge. The first concerned technology. I knew nothing about this particular software or about applications in general. This instigated a crash course on both fronts. I needed to be an authority in the field if I was going to teach it. I also needed be an expert in the product we would be implementing. This was a large piece of software that would organize and manage the operations of an entire city department.

The second, and perhaps more pronounced gap, was my lack of knowledge in project management, business practice and procedure. This is where I felt most naïve and sheltered. I knew nothing of how project management functioned: timelines, deadlines, status reports, time sheets, strategies. O Brave New World. This would be a large obstacle and ironically the most basic. It made my experience in schools seem safe and protected. Why did I feel so cut off from the “real world” of business?

The third gap was technical writing and presenting content in professional, highly stylized forms. I could write pristine, ice-cold sentences, but templates? Word Documents? My basic technical skills were lacking. For someone with my academic experience, my computer skills were abysmal.

The fourth gap was teaching adults. I had taught high school students, but never adults. Adult education is an interactive and dynamic process with the instructor as facilitator. Knowledge comes from the group and, in many respects, instructors learn as much as participants.
I was “404”—a term given to someone who’s clueless—from the World Wide Web error message “404-URL Not Found.” That is where I was with respect to these four knowledge gaps: unfounded. I was able to soak up some information; others were left to mildew. Over a four-month span, I was continuously blindsided by each. It was a race to see what and how I would duck and dodge while scrambling to learn. Thus, the heart of my learning journey began. There was no way to avoid the crash course that awaited me. Prospero had Ariel’s magical powers, trust and ability to help him stage events and conduct mystical spells. The conduction of his experiment was well planned and brilliantly executed. Support and assistance from Ariel helped, irrespective of the fact that both could manipulate the behaviour of others. I had no magic wands to wave or robes to don. My experiment would take hard work.

I was told to devise a Training Strategy document and present it to the rest of the staff in two weeks. Project Manager Rick was at the helm and I was on critical path.

**Critical Path**

Critical path is the term used to describe project stages of utmost relevance. It means fast approaching deadlines and whoever is responsible is granted sanctity. Critical path means hushed voices around your workstation, allowances from social events or menial tasks, hiding out in your office. It also means a large rain cloud overhead that threatens your every fibre. Struggling to meet deadlines means long hours, stress, and vente lattes from Starbucks. Staff members are anxious to please, but approach with caution.

The Training Strategy was a document that would be my master plan. I was told it should outline goals, specific approaches, target dates and methodologies. Enter
knowledge gaps 1 through 4. I wasn’t sure where or how to begin. Rick had a maxim I would soon embrace and reapply to thesis writing: Don’t get it right, just get it written.

The storm had officially struck; I was out of my element, disoriented, off course. It was time to learn the ropes and cling to something—an academic background. Oblivious to the nuances and people of the business world, there was one element I now shared with many: I was part of the workforce that needed training and knowledge. My situation was not out of the ordinary.

Knowledge management

Learning in the workplace is a key consideration for employers and employees, especially when it comes to beginning a new job.

Almost everyone knows, starting a new job calls for rapid learning. New members of staff have to find out, in double quick time, about the geography of the workplace, the routines and demands of the job, and the relationships with managers and colleagues. There are given—or have to give themselves—a ‘crash course’ in all of these and more. And learning does not stop when this crash course is over. Every workplace changes, and every worker has to learn about and from these changes. (Jarvis, Holford, & Griffin, 1998, p. 110)

Lifelong learning has become the motto of the new knowledge-based society (Schuetze, 1999) and senior executives at many large corporations around the world have embraced this as part of their long-term vision (Lucier & Trerierir, 1997). Organizational goals aim to facilitate environments within which learning is shared and knowledge communities built. These goals convert into productive work critically important for companies to create and maintain competitive advantage.

Learning organizations and lifelong learning are essential to economic health. Drucker (1991) writes:
We know that the source of wealth is something specifically human: knowledge. If we apply knowledge to tasks that we already know how to do, we call it productivity. If we apply knowledge to tasks that are new and different, we call it innovation. Only knowledge allows us to achieve those two goals. (p. 69)

Drucker suggests increased knowledge bolsters productivity and innovation. Botkin (1999) contends executives should facilitate knowledge growth within their organizations by building knowledge communities where learners regularly connect and share information:

Knowledge communities in business are groups of people with a common passion to create, share and use new knowledge for tangible business purposes. Successful knowledge communities bond with a sense of belonging that comes with shared values or a common commitment. Members tend to trust one another and to open themselves up to creative brainstorming without fear of being ridiculed for ideas without immediate implementation. (p. 30)

Senge (1990) subscribes to learning organizations "where people continually expand their capacity to create results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together" (p. 3). Learning and knowledge are key terms in contemporary corporate rhetoric. But what types of knowledge are companies talking about? Were the technical and business skills I required considered knowledge?

Botkin (1999) uses a ‘waves to wisdom’ model to describe his definition of knowledge. His model consists of three waves becoming progressively larger. Each wave originates from smokestacks that represent the status quo of many legacy companies and refer to the narrow focus and dysfunctional state of functionally organized companies (Botkin, 1999). Data is the first wave in which transactions are recorded in a system. The second larger wave is information, where data are arranged into meaningful messages. The final and largest wave is knowledge, where information is put to productive use. On the far right of all the waves representing the horizon between sea and sand is wisdom,
the discerning use of knowledge (Botkin, 1999, p. 28). Learning is the process of moving from one wave to the next, while training is instruction and mastery at any given wave:

“Learning in business today is the process of acquiring knowledge and training is the process of making sense out of data and information” (Botkin, 1999, p. 28).

So where was I aside from frantically looking for life rafts amongst all these waves? I was learning and acquiring knowledge, but the learning I was doing was what the Club of Rome dubbed maintenance as opposed to innovative learning: “Maintenance learning is the acquisition of fixed outlooks, methods, and rules for dealing with known and recurring situations. It is all about training, mastering data and analyzing information” (Botkin, 1999, p. 134-135). There was nothing innovative about the information and learning I was doing at the time, especially when I compare it to the growth and learning I have engaged in while writing my thesis. Absorbing new technical material, learning about project management and technical writing were what Argyris and Schon (1978) call “single loop learning.” Senge (1990) calls it “adaptive learning”—important for surviving but not for thriving. And that’s all I was attempting, survival.

Perhaps innovative learning (Botkin, 1999), double loop learning (Argyris & Schon, 1978), and generative learning (Senge, 1990) describe learning processes I engaged in while writing my thesis. This is also the type of learning Prospero would have engaged in after years of exile on his island. Learning involves “renewal, problem reformulation, and transformation...[This type] of learning in business is rare” (Botkin, 1999, p. 135). The process of writing a thesis has been transformational for me, just as years of study and reflection must have been instrumental in transforming Prospero’s feelings towards the world, especially towards those who caused him harm. On a societal
level, innovative learning is “a necessary prerequisite to the solution of global problems and a means to prepare individuals and societies to cope with, anticipate, and create, a new future” (Boshier, 1996, p. 45). Its concept originated with the Club of Rome:

It encourages [people] to consider trends, to make plans, to evaluate future consequences and possible injurious effects of present decisions, and to recognize the global implications of local, national and regional actions. Its aim is to shield society from the trauma of learning by shock. It emphasizes the future tense, not just the past. It employs imagination but is based on hard fact. (Botkin, et al., 1979, pp. 12-13)

Businesses or learning organizations that facilitate innovative learning enhance their capacity to learn, adapt and change (Senge, 1990). Few companies, however, ever achieve this idyllic state. Lucier and Torsilierir (1997) estimate only one-sixth of companies instituting organizational learning programs achieve significant results within two years:

Many of these programs generate excitement among participants, stimulate collaboration and create tangible outputs like knowledge databases and collaborative systems [but] unless a program generates significant business value, executives under pressure for near-term profitability decide that although a knowledge management or learning organization program might be nice in the long term, it is not a critical current initiative. (p. 3)

Some private sector companies create structures to promote organizational learning, but whether providers pay sufficient attention is debatable:

My suspicion is that most organizational learning takes place in the corridors, on the stairs, by the coffee machine, on journeys between meetings, even in the toilets, usually by means of snatched conversations between two people, sometimes enlarged to a small group through strategic eavesdropping. (Merton, 2000, p. 18)

In many work situations, mine included, optimistic ideals become mired in day-to-day mud puddles. Strategic conversations around the coffee maker are invaluable sources of information and learning.
Wenger (1998) argues that learning cannot be designed, but one can design for learning. He proposes a 'learning architecture' that supports and nurtures learning by building infrastructures and processes into the contexts of peoples' lives. He argues that one cannot determine what people learn, since individuals have their own purposes, intentions and meanings where learning is concerned (Cairns, 2000).

Knowledge management is a concept embraced in organizational learning and has elicited a great deal of attention (Drucker 1991; Marsick & Watkins 1990; Senge, 1990; Botkin, 1999). Knowledge management largely comes out of human resource management and development discourses, which view knowledge as a commodity—a product or factor of production. Marsick and Watkins (1990) suggest: “the creation and management of knowledge within the system and its contribution to knowledge outcomes are captured through the idea of intellectual capital” (p. 207). The idea of intellectual capital in organizational contexts is directly connected to the assumption that to prosper, companies will have to draw on all their resources including those of a more ‘intellectual’ kind (Botkin, 1999). These might be language abilities, numerical and logical skills, and knowledge of organizational culture or technical know-how (Marsick & Watkins, 1990).

What’s the buzz?

To don Prospero’s robe of magician and philosopher, I confess suspicion of the hype. The corporate buzz about knowledge management, protean careers, lifelong learning, free agent learning, and new breeds of worker smack of a largely inhumane, systematic way of describing people, personalities and knowledge. Had that been my role as a high school teacher? Managing knowledge? Preparing young minds to walk around in the ‘real world,’ gift-wrapped perfect commodities sold to the highest bidder.
for what was between their ears? Where was the commitment to creativity and respect for the individual? This was not how I envisioned education and learning. Herding chattel. Selling skill. People have become an economic commodity to be combined with other forms of capital to produce increased wealth for owners and shareholders (Schied, Howell, Carter, & Preston, 1998).

Have corporate rebels hijacked the fundamental elements of education? Have the democratic ideals of Dewey and Rosenblatt been expulsed by guerrilla business executives? Lyotard (1984) feels universities and to a certain extent all education, have been plagued by an ideology of performativity, meaning only education contributing to the economy is of value (Boshier, 1996). The task of educational institutions is to “create skills, and no longer ideals...The transmission of knowledge is no longer designed to train...(people)...capable of guiding a nation towards its emancipation, but to supply the players capable of acceptably fulfilling their roles at the pragmatic posts required by its institution” (Lyotard, 1984, p. 53). The impetus behind knowledge management and teaching employees is about getting payback. Outputs, cost-dividends, and supply chains cast liberal arts adrift. Liberal studies are often cited as appearing irrelevant, superficial and too abstract (Fisher, Rubenson, Schuetze, 1994).

Knowledge management is about preparing employees and employers for the Brave New World and processes of modernization. Systemizing corporate education, training and skills serves the needs of the powerful:

The ultimate business objective of learning is to systematically accelerate a company's natural rate of improvement in value created for the customers it targets. A company's ability to create greater value for customers than its competitors can provide is the primary driver of improvements in its competitive position and the creation of long-term value for its shareholders. Improving performance faster than competitors is of obvious strategic importance. (Lucier & Torsilieri, 1997, p. 3)
In this model, training for employees is directly related to building investment for shareholders. Learning and creating knowledge are about money in business. Or so it would appear:

For some zealots, a "learning organization" has become an end in itself—part of the new relationship between the company and its employees—instead of a means to increase the organization's ability to improve more rapidly. Others focus on measuring and increasing intellectual assets. Even if knowledge assets can be measured, why should a business focus on maximizing its assets instead of using its assets to create value? (Stewart, 1997, cited in Lucier & Torsilieri, 1997, p. 3)

It is unnerving when corporate literature suggests learning for the sake of employees rather than the good of the company constitutes some form of "zealotry."

Perhaps this is why I was a doe in the headlights of the business world. Had learning for the sake of learning been pre-empted, leaving Prospero, Miranda and me on deserted isles with respect to corporate rhetoric and knowledge jargon?

Noble (1990) contends contemporary society is bombarded by seductive corporate rhetoric that espouses the virtues of "knowledge management," "lifelong learning" and "assuming responsibility for one's learning." New corporate lexicon suggests the interests of management, labour and education coincide, when really, the language conceals radically opposing intentions: "The corporate call for high tech skills has little to do with worker empowerment or intellectual enhancement" (Noble, 1990, p. 132). This emphasis on new skills is really an instrument of bewilderment and distraction, and part of the "educational arms race" (Livingstone, 1999). The new skills value subservience and compliance. Social and ethical issues are rarely a part of this discourse; commitment to social responsibility, freedom and human dignity is largely ignored (Schied, Howell, Carter, & Preston, 1998).
Jim Moore, head of Human Resources at Sun Microsystems talks about corporate rhetoric:

I've worked at companies where I've written the speech for the CEO to say, "Our people are our most important asset," and they've said it, but I don't believe they believed it. In fact, I don't believe they were the most important asset, because the jobs were so standardized that it wasn't really that hard to replace the person. The difference between what a really outstanding person contributed and a not-so-outstanding person contributed was relatively small. There wasn't room in the jobs for individual variance to make that big a difference. Therefore, it was lip service. Look at these high-tech companies that have these market caps or price-earnings ratios that are so outrageous. How can you justify that? You cannot justify it because of any process they have; processes are easily replicated. Markets are easily stolen. It's just the intellectual capital that differentiates. (Rosner, 2001, p. 70)

Corporate rhetoric can be persuasive and problematic. Acceptance of a learning organization involves unquestioned approval of the demands of a global economy and tacit acceptance of specified knowledge and discourse (Schied, Howell, Carter, & Preston, 1998). While much of the language of the learning organization appears to embrace such concepts as empowerment, participation, trust, collaboration and teams, these concepts are often used by corporations and institutions to regain control of the workplace while taking advantage of increased input from workers (Schied, Howell, Carter, & Preston, 1998). Livingstone (1999) suggests “the rhetorical claim that we are now living in a “knowledge-based” economy in which most workers lack the knowledge and skills to cope with rapidly changing job requirements should be treated very sceptically” (p. 178). He contends that currently the vast majority of the Canadian labour force is either adequately qualified or overqualified for their current jobs.

Corporate rhetoric has more to do with issues of power as opposed to the needs of the employee. Foucault (1979) argues that power increasingly “makes itself everywhere
present and visible; it invents new mechanisms; it separates, it immobilizes, it partitions; it constructs for a time what is both a counter-city and the perfect society; it imposes an ideal functioning” (p. 205). He shows that the state becomes more and more like a laboratory:

a machine to carry out experiments, to alter behaviour, to train, or correct individuals... To try out different punishments on prisoners, according to their crimes and character, and to seek out the most effective ones... To try out pedagogical experiments – and in particular to take up once again the well-debated problem of secluded education, by using orphans” (pp. 203-204)

Foucault’s rendition of the state is similar to what this research indicates or what Jim Moore suggests. Businesses and high tech companies carry out experiments, alter behaviour, train and correct. The question of who decides what knowledge is legitimate and which skills are most desirable is market and power driven. The single-minded focus of corporate management is on the organization’s ability to profit within the global marketplace, while ignoring the increasing levels of poverty and suffering at the one extreme and the massive accumulation of wealth by the few at the other (Schied, Howell, Carter, & Preston, 1998). Even if Canadians are to believe that continuous updating and mastery of work-related skills are essential, general economic factors closely related to occupational class, especially income, predict adult participation rates in training or retraining in adult education courses. High-income groups have been more than twice as likely as the lowest income groups to participate (Livingstone, 1999).

Worker cynicism flourishes in the paradoxes abounding the new ideals of continuous learning throughout the organization. Many workers are left numb, empty, useless, even violated by their jobs (Fenwick, 2000). Perhaps my scepticism percolated from the way I was feeling at the time, like a chattel, a cog in the machine that needed a
great deal of oiling. My employers didn’t care about me as a person as much as they cared about me getting the job done. It was simple: if I didn’t learn and perform adequately, I was gone.

Prospero 1.1

What’s Hot!

Prospero 1.1 is an OLE-based automation tool that integrates desktop suite software, Lotus Notes, ODBC databases, and data on the Web into productivity applications. The tool can create links between data sources and documents through visual "building blocks," and can automatically fill out HTML forms and pull data from HTML tables. (Gallagher & Caldwell, 1996)

A high tech company has named a piece of software after Prospero. He adopts so many roles in The Tempest it seems natural to regard him as a mighty networking database. His name denotes knowledge and power, which for some suggests perfect branding for a software application. The roles of Prospero extend to colonizer, magician, dramatist, patriarch, island sovereign, scientist, intellectual, scholar, and teacher (Carey-Webb, 1999). In contemporary society, he might well be a systems analyst, network technician and graphic designer, or perhaps education consultant.

Throughout The Tempest, Prospero teaches everyone. Much like a database, he monitors movements, manipulates data and sees all. Aside from Ariel, he trains, and instructs each character. As educator, he internalizes bonds of allegiance that confirm and maintain his authority (Carey-Webb, 1999). Prospero has a lesson plan prepared for each character shipwrecked on the island. Alonzo, Sebastian, and Antonio learn their crimes against Prospero cannot be forgotten and that he should be reinstated as rightful Duke of Milan. Ferdinand comes to recognize Prospero’s role as master and teacher, and Miranda and Caliban are skilfully tutored.
Critics have challenged Prospero's authority over the years. Issues of imperialism and authority of knowledge and power are common to critical analyses of *The Tempest*. For over a century, and particularly in the past twenty years, a number of interpretations have explored its political issues (Johnston, 1999).

*Tempest re/view*

Post-colonialists approach the play for obvious reasons. Prospero has taken charge of a remote island. With special powers, he organizes a life for himself, gets the local inhabitants, Ariel and Caliban, to work for him, and maintains control by force or threats of force, spells, and promises of freedom. Caliban identifies the relationship between Caliban and Prospero: "I am subject to a tyrant, a sorcerer, that by his cunning hath cheated me of the island" (III.ii.44-46). In taking ownership of a place that is not his and exerting his authority over others, compelling them to serve him and his values, Prospero is viewed as a symbol of colonial power (Johnston, 1999).

Post-colonialists argue that Shakespeare's play is essentially about disenfranchisement. Prospero is a colonizer and Caliban an enslaved native. Caliban is arguably sympathetic and treated cruelly by others (Carey-Webb, 1999). He is referred to as "monster," "thing of darkness," "mooncalf," and "poisonous slave," and is forced to learn the language of the colonizer (Mullenix, 1996). The attempted rape of Miranda is somewhat exonerated by scholars who argue that Prospero repeatedly invokes this incident as a way to divert Caliban from his rightful claim to the island (Mullenix, 1996).

Some suggest a postmodern analysis of *The Tempest* is unjustified and unfair. Prospero should be viewed in light of philosopher-king and rule of the wise, rather than
judged by political deconstruction of the day (Cantor, 1993). Questions of knowledge, power and legitimacy run through the text. These are also issues that span business, high tech and academia.

_Education is central to The Tempest, just as it is to many working adults in contemporary society. It may be argued that CEO’s are similar to Prospero in dictating what and who should be taught, but in my situation, there were no central characters to tell me what lessons I should learn, despite my dire need for training. If opportunity and time presented itself, I would have leapt at the chance to participate in work-related training, but what were my options? Many people look to the education system to provide them with a vehicle for job readiness (Rubenson, 1997). What do universities and corporate educational programmes have to offer and how are they coping with increased demands for work-related training?_

_Trends in corporate education_

The pressure for employers and employees to participate in work-related education and tackle the skills gap is immense:

If you are not being educated in your job today, you maybe out of a job tomorrow...Employee education is not growing 100 percent faster than academia, but 100 times—or 10,000 percent—faster....Over the next few decades the private sector will eclipse the public sector and become the major institution responsible for learning (Botkin & Davis, 1998, p. 49).

The need for further education in the workplace has placed demands on universities and sparked concern about skills gaps between the needs of employers and labour force.

Tucker (1996) states that the skills gap stems from the disparity between what skills the education system is providing and those necessary in a high-performance workplace. In the last few years, hundreds of companies have sprung up to compete for their piece of
the $740 billion Americans spend annually on education and training. Eduventures.com L.L.C., a Boston-based consulting firm, puts total 1998 revenue for the for-profit education industry at roughly $82 billion (Barker, 2000).

Given current pressure on education systems to provide workplace skills, the role of education under the current economy is in question. Employers are a driving force on the education of individuals, and when educational outcomes cannot be reduced to market quantification, education is viewed uneconomic and a waste of resources (Marginson, 1997). When the focus of education is on the degree to which it prepares people for work, liberal notions of education become threatened. Education shifts from the liberal notion of developing individuals to serving the economy by producing skilled workers (Blackmore, 1992).

In the United States, business leaders complain that high school graduates are often unable to perform rudimentary tasks and parents have clamoured for reform—longer school days, stricter discipline and a greater emphasis on traditional skills such as reading, writing and mathematics (Botkin, 1999). Policy has responded by stressing "more" hours, more homework, more science, more math, instead of focusing on teamwork, values or holistic learning. Critics suggest traditional universities and colleges have been slow to respond to societal pressure, and as a result, past monopolies exercised in the provision and certification of higher education are under pressure (Botkin, 1999).

Within a Canadian context, Livingstone (1997) argues people have more than enough education for the workplace. As high as 40 percent of workers are in employment situations where their skills are not being utilized "But, beyond the rhetoric, there is little
evidence that the level of education needed within actual labour processes has greatly increased” (Livingstone, 1997, p. 83).

Irrespective of perceived needs, businesses are requiring employee training in increasing numbers, and since they can’t always get training at traditional universities, they are devising their own schemes and banking on the process (McMorrow, 1999). Employers and employees want flexible programs in tune with new work practices and technologies (Spender, 2000). Since time and resources are often tight, less traditional and informal methods of learning are perceived as healthy alternatives. Time and resources are precious in today’s marketplace and it would appear business is set on challenging the ways in which individuals learn, what they learn, and when.

Corporate U

Approximately two thousand corporate universities appeared in the United States last decade (Spender, 2000), with over one-third of professional educators working for them (Botkin, 1999). Since traditional university programs do not always meet company-specific business and technological demands, companies develop their own. Applied Materials Inc. of Santa Clara, California has its own Applied Global University which offers employees 600 courses and training segments (Izzo & Withers, 2000). “Schwab University” offers courses in such areas as leadership and management skills, technology, communications, securities, and exam preparation (Izzo & Withers, 2000). Corporate universities are desirable for shareholders because training current workers is cheaper and less disruptive than hiring new staff (Izzo & Withers, 2000). Training is integrated into workdays, costs are reduced, and training is work-specific.
Since traditional university programs do not meet with company-specific business demands, it's safe to assume there are few postmodern workshops exploring issues of power on the Corporate U syllabus. Do liberal arts courses fit or are they immaterial and secondary to the demands of business and technology? They are valuable scaffolds to innovative learning. But does society care that education may be relegated to maintenance learning—cheap, status quo and less disruptive to the needs of the happy corporate few? As individuals scuttle through workdays at a clipped pace, it seems difficult to know if they have a choice or time to consider such questions.

The sell out of a traditional liberal arts education is a concern—but I cared little at the time. I was too immersed to question, too absorbed in strutting and fretting my hour upon the stage to stop and contemplate the moral and ethical considerations of my plight. I was on critical path. The only way to receive training was in a formalized workshop or e-learning program.

E-learning

Electronic learning and distance education reach students at home or work via information and telecommunications technologies, including audio, televisions, telephone and computers. With education independent of location, learners can overcome limitations associated with traditional education. Factors such as travel and accommodation costs, disruptions to workflow and personal life, and timing, duration and content become less relevant. The number of people who can participate greatly increases. E-learning makes better use of time and resources, and is a powerful source of continuous learning and career development (Young & Hall, 1995). All learning businesses, from schools to universities, are doing more online. Most institutions have
made major investments in new technologies and have distributed computer capacity across their campuses. Faculty are linked with students and with one another, generally providing the necessary IT-infrastructure needed for faculty involvement.

IT learning offers economies of scale traditional faculty cannot match (Massy & Zemsky, 1996). After front-end investments, costs of usage per incremental student are apt to be low, and access to large amounts of information can be obtained at low incremental costs. E-learning offers mass customization—faculty can accommodate individual differences in student goals, learning styles and abilities, while providing improved convenience for both students and faculty on an “any time, any place” basis. Online learners can interact with tutors and students, and connect to anyone or any online product in the world. Learning is flexible, active, cost-effective and the selection, exhaustive.

E-learning is reputed to have an advantage over traditional class-room based education. Proponents contend it does a better job of preparing learners for the “Knowledge Society” because it connects learners and instructors with each other, plus leading experts and the best libraries and databases in the world (Harasim et al, 1995). They claim it encourages active rather than passive learning, and fosters learners’ research, writing, computing, and collaboration skills.

Holmberg (1995) considers seven guidelines to distance learning: personal relationships between teaching and learning parties should be established; self-instructional material should be well developed; there should be intellectual pleasure in the exercise; the atmosphere, language and conventions should foster friendly conversation; messages to learners should be easily understood and remembered;
conversational approaches should always be used; and planning and guiding are necessary. Even if these guidelines are adhered to, empirical investigations on the impact and quality of electronic learning are sparse and equivocal. Research reports a range of both positive and negative findings.

Institutional, instructional, technical, and personal barriers are considered obstacles to IT education (Piotrowski & Vodanovich, 2000). Issues surrounding privacy, the quality of interaction and technological difficulties are also cited as problematic. Researchers for Com Tech Education Services, an Australian IT education company, found only fifteen percent of companies using online learning programs ranked them as successful (Gifford, 2000). General Manager Ross explains:

We believe humans learn best from humans and that online learning is not an acceptable substitute for face-to-face training. Staff enthusiasm for this type of learning is low because it is mass personalized and a sterile and artificial form of communication. People are different, yet online courses are pitched to everyone in the same way...Multimedia companies may be brilliant at what they do, but they don't understand the particular instruction methods you need for technology nor of the need to surround it with other things - the human content. (Gifford, 2000, p. 1)

Although some subject areas with a high volume of students and a standardized curriculum, such as basic math or general composition courses, are well suited to e-learning, other subject areas will never be, "especially those concerned with questions of meaning and value, of culture and philosophy. Nor even beyond those subjects, will IT-based teaching and learning programs ever substitute fully for human interaction" (Massey & Zemsky, 1996, p. 13).

The foundation of instructional design and educational technology has traditionally been behavioural psychology (Gibson, 2000):
The classic instructional design that emerges from this foundation advocates an analysis of the learners’ entering characteristics and the skills required to perform the task in question. Once this analysis has been conducted, behavioural objectives to guide the remainder of the instructional design process can be determined. Development of criterion-reference test items follows. Instructional design and development then occurs, the education or training is delivered, and evaluation follows. (p. 428)

But are instructional designers designing the “right material”? A large number of courses are “written by a course designer whose employment was likely terminated when the course was ready (thanks mate ... see you later!)” (Boshier, 2000, p. 2). There is a lack of any overarching sense of purpose or preconception of what the shape and consequences of information technology learning should take (Massey & Zemsky, 1996), or how it should be designed. There are also few ways to monitor an industry whose hype is growing at exponential rates:

the atmosphere around distributed learning resembles a goldrush. Learners buy fools gold and there is a sense that educators who don’t join will be left behind and suffer an early demise. Unlike earlier goldrushes, when staying home was an option, this time educators are mounting the wagon with haste. They don’t know much about what lies along the trail, the destination is obscure, there is scant research to guide their journey and marauding corporations have already staked claims. A vast majority don’t know what they’re doing and significant numbers are supposed to do the "technology bit" in their spare time. This goldrush has much in common with the fruitless search for Anian—Impulsive, poorly researched, under theorized, chaotic and, in the end, costly. (Boshier, 2000, p. 1)

Business communities will not await final word from scholars. Adult education in the workplace is big business. Business and industry make extensive use of instructional technologies to conduct training at their branch offices around the country and the world (Gibson, 2000). The online learning market in 1999 generated $600 million in annual receipts and is expected to exceed $10 billion by 2002 (Izzo & Withers, 2000). With respect to work-related training at American schools, the American National Center for Educational Studies (United States Department of Education, 1997) claims, “Thirty-nine
percent of institutions that offered distance education courses in the fall of 1995 targeted professionals seeking recertification and 49 percent targeted other workers seeking skill updating or retraining” (p. 17). E-learning provides flexible opportunities, especially for IT courses. Most are judged successful because of their convenience (Gifford, 2000). The demand for IT-based teaching and learning programs will grow substantially over the next decade and substantially change teaching and learning (Massey & Zemsky, 1996).

The ‘gold rush’ captured my attention, but before I don my Levis and head for distant creeks, it’s time to summarize this chapter. Literature suggests that since little time can be devoted to education in formal settings, corporate training needs to be flexible and cost-effective. Who benefits from all this corporate training is less clear. Training for the workplace is just that—work-related and job “described”; hence, learning objectives are specific to the needs of stakeholders and shareholders. What is best for the employee is rejected and replaced with jargon. Corporate work-related terms such as “knowledge management,” “adaptability,” “taking responsibility for your learning and skills” indicate to employees they must be attentive to powers and forces from above and learn what they are supposed to learn—faster than before.

Humanity seems to be in a race with technology. People allegedly need to be faster, flexible, adaptive, and to learn more quickly. Yet what is the rush? And who said citizens want to run? The race against technology is an economic one between companies trying to cross the finish line first to clinch money and endorsement. Workers today are like greyhounds, lean and gritty, chasing a fake rabbit until they can run no more and are put down to rest. But maybe things are starting to slow down. People working in high tech, dot-coms and other businesses are being laid off by the
thousands: 2400 jobs at AOL Time Warner, 1300 at Amazon.com, 26,000 at DaimlerChrysler, reportedly 50,000 coming at General Electric (Gay, 2001).

High tech workers, in states of "adaptability" are making the most of the situation. It is now 'hip' to be out of work and receive a pink slip. Anti-pink slip parties are the current couture in upscale Silicon Valley and New York bars and restaurants. Laid off workers comment they are: "Sick of 80-hour work weeks and $22 lamb chops, these innocents think that a slough is a badly needed antidote to eight straight years of money-soaked New York excess" (Gay, 2001, p. B3). Is this a genuine backlash against the unbearable hours dot.com sweatshop workers have endured, or further indication of corporate mentality—work them so hard they feel they deserve a lay off?

I began this act by making a checklist of professional skills and then outlined shortcomings that would present themselves. When Rick put me on critical path with the Training Strategy, I needed to run like a greyhound—fast. In Act II, I looked at the importance of training in the workplace, examined issues of power and knowledge related to business, university and Prospero as colonizer. I also discussed alternatives to learning in the workplace such as corporate universities and e-learning programmes. As we head towards Project Island, Act III looms ahead. It deals with learning the ropes—my perspectives and the academics'—as well as further assesses three of the four items on my wish list of skills: technological expertise, project management, technical writing, and teaching adults.
Act III Learning the ropes

I saw him beat the surges under him
And ride upon their backs. He trod the water,
Whose enmity he flung aside, and breasted
The surge most swol’n that met him. His bold head
’Bove the contentious waves he kept, and oared
Himself with his good arms in lusty stroke
To th’shore, that o’er his wave-worn basis bowed,
As stooping to relieve him. I not doubt
He came alive to land.

The Tempest II.i.119-127

My experiences in high school and graduate school caused me to believe academic institutions were the only settings where ‘real’ learning occurred. This, however, is not the case. Learning does not necessarily take place within defined realms, nor does it require predefined outcomes to be considered legitimate. Learning occurs in a variety of forms and situations. Learning is the focus of Act III.

My new “academic institution” was the makeshift office. This was a non-formal setting, typical of where most workplace learning occurs. Workplace learning can also occur in formal settings (Hagert & Beckett, 1998), but my opportunity to experience that came later. The bulk of my workplace learning would take place in this informal setting. In work settings of this nature, the learner is in control, there is no formal curriculum or
prescribed outcomes, and learner is commonly unaware of the extent of her learning (Hagert & Beckett, 1998). Learning is highly contextualized and interwoven with emotive, cognitive and social dimensions of experience. My workplace learning was the development of competence or capability through a suitably structured sequence of experiences (Hagert & Beckett, 1998).

My lack of understanding in the areas of content and application, technical writing, business process and teaching adults resulted in a great deal of scrambling and thinking on my feet. My new academic institution did not offer a predetermined course syllabus or reading list. I had to devise my own. It all started with the Training Strategy.

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Prior to my arrival the plan was to have business analysts write and deliver training material. These happy few were part of the user/client group—city employees selected to work on the project. They were called User Business Analysts, or UBA's. Bringing UBA's on board was done to create a sense of ownership and expertise. This way, when the software was up and running and well into its third round of implementation, consultants could leave and management would be relinquished to clients. This meant UBA's would become responsible for training; thus part of my role as education consultant was to “train the trainer.”

Many adult educators come into the field of adult education through the back door with little formal experience or instructional background (Boshier, 1996). I was entering the back door of adult education along with the UBA’s. Whereas the UBA’s were terrified of teaching and standing in front of peers, I was just terrified. Since I was
semi-qualified, bringing me on board was their salvation and they were off the hook. In the end, several UBA's did limited instructing and some were very good. It is generally assumed trained adult educators are better than untrained ones; however, many maintain no one should be denied an opportunity to practice adult education because of lack of training (Boshier, 1985). The best forms of adult education blur distinctions between learner and teacher, professional and non-professional. Any outstanding writer, artist, musician actor or other person with something to offer should be able to teach adults. Our project team could only hope the UBA's and I would be 'gifted amateurs.'

Prospero and Ariel are untrained adult educators with little formal experience, yet both are successful. Ariel is a lab partner to Prospero's experiment and makes significant contributions to the education of others. Ariel even teaches a lesson or two to the great magician himself. For instance, when Prospero has his confused enemies in his power, Ariel comments: “if you beheld them now, your affections / Would become tender.” Prospero replies: “Does thou think so spirit?” to which Ariel responds: “Mine would, sir, were I human” (The Tempest, IV.i.18-21). Subsequently, Prospero contemplates his actions and arrives at his conclusion: Virtue expressed in forgiveness is a higher human attribute than vengeance. In the end, Prospero offers forgiveness and acceptance of his enemies. He learns through reflecting and interacting with Ariel.

Ariel is to be applauded for his insight. He would probably raise an eyebrow to UNESCO's 1985 Commission II final report that called for increased credentialing and professionalization in the training of adult educators. The American Commission of Professors of Adult Education has been under pressure to support credentialing of
trained personnel because of the large number of institutions and persons who have recently discovered adult education. Most members oppose it, but some suggest it curtails “charlatans” from becoming official providers (Boshier, 1985). Ariel hates the term charlatan, as I am sure the UBA’s would too. Within our situation and project plan, credentialing the staff responsible for training would have proved difficult. Tom was scrambling to find anyone interested in training. I was the one who felt like a charlatan, desperately trying to make others believe I knew what I was doing.

If I were to train the UBA’s to train, they first had to teach me content. I needed material about the software. Part of the Training Strategy document was to devise a plan that would successfully harness their knowledge and provide them with structure to teach. The first action item was determining how many courses were necessary. It was first year teaching all over again: make unit plans, list objectives, find course material and sleep with a textbook. This prescription seemed to work for Social Studies 10.

I designed course overviews and templates for each section and fashioned them after the familiar format of a lesson plan and partial Tylerian approach (Worthen, Sanders & Fizpatrick, 1997):

- Establish broad goals or objectives
- Classify goals or objectives
- Define objectives in behavioural terms
- Find situations in which achievement can be shown

This was the type of objectives-oriented structure I knew. It wasn’t scaling Bloom’s taxonomy or Maslow’s hierarchy, but my unit and lesson planning and organizational
skills were rumbling; I clung to what I knew, somewhat comforted by previous experience and so-called simplistic educational formulas. Setting curriculum for adult education follows similar principles: “adult education teachers have to know how to create instructional objectives, analyze them into learning tasks, and employ techniques congruent with the outcomes sought” (Boshier, 1985, p. 15). My principles were in order.

The next step was identifying target audiences. That meant moving into an administrative role, creating class lists and co-ordinating names and places. Participation in our classes would be mandatory. Perhaps the ease of creating administrative lists is a partial reason why participation is one of the most thoroughly studied areas of adult education.

The study of participation tells us who participates, what’s studied and what motivates certain people to enrol in adult education courses. Little has changed since the original profile of adult learners set by Johnstone and Rivera (1965). Compared to those who do not participate, participants in adult education are better educated, younger, have higher incomes, and are most likely to be white and employed full time.

In Canada, the same holds true. Adult education continues to serve to reproduce the major social structural inequalities in Canadian society (Livingstone, 1999). Adult participants are generally well educated:

Managers and professionals, the majority of whom have university degrees, are about twice as likely as industrial workers to have taken an adult education course in the past year and also much more likely to plan on taking future courses. (p. 175)
They are more likely to be younger and white, with aboriginals and other visible minorities remaining seriously underrepresented (Livingstone, 1999). And they are more likely to be women.

I was a prime candidate for participation in adult education courses, but there was little time for such luxury. It was imperative I devise my own plan of action, especially in conjunction with the most important and largest gap in my knowledge surrounded training course material content. I needed to set instructional objectives, but had little clue as to what the criteria should be. There was sparse information available about the software application for which I was responsible. Since much of it had been customized to suit the specific needs of the project, the meagre generic information available was of little help. There were no textbooks or libraries for research. No formal workbook aside from a management book targeted for software technicians—a “how-to” set up software and customize screens. This type of writing was far beyond me. It assumed the user knew the purpose, capabilities and navigational tools of the software. I was nowhere near having that type of technological expertise. My teaching experience could go only so far. This was where the real experiment began, both Tom's and mine. Could I handle it? Could I learn the content?

Reflective learning

My learning was inseparable from the context in which it took place. In other words, my situation was as important to the learning processes as what I, learner, brought to the situation. I was what Schon (1987) termed a reflective practitioner. Reflection-in-action assists anyone in reshaping “what we are doing while we are doing it” (p. 26). This is the ability to think on one's feet. Reflective practice means making judgements in
complex and murky situations based on experiences and prior knowledge, while still engaged in that practice (Caffarella & Merriam, 1999). It denotes commitment to problem finding and solving, making judgements about actions in particular situations, and addressing issues of power and oppression in those judgements.

Reflective practice is a sub-category of reflective learning (Jarvis, 1995). Throughout lives, individuals accumulate a wide range of experiences packaged in memories and brought to every learning situation (Caffarella & Merriam, 1999). Memories influence interpretations placed upon individual and personal experiences. The way situations are perceived is largely determined by individual biography.

Other categories of reflective learning are contemplation and experimental learning. Contemplation is “the process of thinking about an experience and reaching a conclusion about it without reference to the wider social reality” (Jarvis, 1995, p. 73). Since this defines “thought processes of philosophers” and “activities of pure mathematicians” (Jarvis, 1995, p. 73), contemplation is more tropical than topical. It aptly describes Prospero’s engagement and learning on the island better than mine. Prospero had years to consider his situation with Miranda, to contemplate relationships with his brother and with those involved in his banishment. He had time to reflect upon his books and philosophy, as well as evolve his magical powers. Each event in The Tempest is a subsequent result of Prospero’s reflection and thought process. Audiences witness the fruits of his labour.

Experimental learning best describes my situation. It is “the form of learning in which theory is tried out in practice and the end-product of the experimentation is a form of knowledge that relates fully to social reality” (Jarvis, 1995, p. 74). In experiential
learning, life is described as passage through time. Human existence is situated within
time and emerges through it. It is argued that learning is the process through which
humans grow and develop. Time is experience and past learning bears upon present
situations. This summarizes my learning experiences while writing this thesis.

Miranda and I both relied heavily on learning from secondary experience. At
the end of the play when the entire cast sets sail for Italy, Miranda has little
understanding of what to expect. She is as educated and well-equipped as Prospero can
make her. Prospero can only hope that her secondary experience will help her cope and
make good decisions. Perhaps that is what graduate school had done for me. Secondary
experience learning occurs most frequently in formal education where a great deal of
tory is taught and learned (Jarvis, 1995). A great deal of my learning in graduate
school occurred through linguistic mediation, either through conversation or by
listening to lectures. This is typical for secondary learning.

Miranda learned most from her father and books. Much like the graduate
student, she was flush with theory but short on experience. How Miranda will fare in
Milan is unknown. We were both heading to New Worlds with little idea of what lay
ahead. We were equipped with skills to a certain degree, but would this knowledge be
enough? There was no Ferdinand on my arm, no reassurance of romantic love and
promise. I felt more like Prospero at the onset of the play—pushed off to sea not
knowing where the journey was going to end.
Perspective transformation

Perhaps when Miranda arrives on the Amalfi coast she will retest her beliefs and transform her perspectives about the Brave New World. She may engage in perspective transformation:

Perspective transformation is the process of becoming critically aware of how and why our presuppositions have come to constrain the way we perceive, understand, and feel about our world; of reformulating these assumptions to permit a more inclusive, discriminating, permeable, and integrative perspective; and of making decisions or otherwise acting upon these new understandings. More inclusive, discrimination, permeable, and integrative perspectives are superior perspectives that adults choose if they can because they are motivated to better understand the meaning of their experience. (Merizow, 1990, p. 14)

Critically reflecting upon our lives, becoming aware of “why we attach the meanings we do to reality, especially to our roles and relationships...may be the most significant distinguishing characteristics of adult learning” (Merizow, 1990, p. 11). Transformational learning theory focuses on individual perspectives. It is about change—dramatic fundamental changes in the way individuals see themselves and the world in which they live (Mezirow, 1990). Self-reflection in transformational learning is often triggered by a major dilemma or problem, such as being exiled from one’s home. Reflection may be undertaken individually as well as collectively with those who share similar problems or dilemmas. The end result of this process is a change in one’s perspective (Merriam & Caffarella, 1999).

With respect to my education and process of writing, new learning is transforming my existing knowledge into new perspectives. For example, forcing me to challenge power structures and question the motivation of my company. In doing so, Merizow contends the learner is emancipated. However, the graduate student is never truly free until she has successfully defended and made the final walk across the
graduating stage. Thesis writing is more like the final walk across the bridge of sighs—
emancipation seems slim. And thus it was with education consulting, little chance of
escape.

**Sinking fast**

Emancipation is the theme Prospero dreamed of. His name is derived from the
Latin “pro,” meaning forward, before, and “spero,” I hope—hopefully looking
forward. A most suitable epithet. I was trying to think on my feet, like a reflective
practitioner, but despite efforts, I secretly hoped during my twelve-hour workdays,
through the cold, milky sludge at the bottom of a latte cup, an epiphany would occur: a
light would go on and finally I would ‘get it.’ I would understand the capabilities of the
software and remember all the departments and subsections of the project.

The UBA’s were sinking. Of nine, there were four I worked with closely: Clara,
Don, Chuck and Wade. They were overwhelmed by the amount of information that had
to be taught. Faced with supplying me with content and perhaps having to teach,
pressure was on to test software and deliver information to the project manager. They
were stressed and already working ten- to twelve-hour days. I was told to ask for more.
I needed to know what they knew, but quickly realized wasting their time was
irresponsible. We were all on tight deadlines—critical path. It was more of a tightrope
than a path. I needed help, but was careful to retain composure—I didn’t want them to
know how little I knew. The scheduled training dates were looming. If this was typical
for work in high tech, I wanted out.

I had difficulty eating or sleeping during this time. I was seasick. I was trying to
learn, but felt more like drowning. My thirst to learn was “normal” for someone in my
circumstance, as were my insecurity, stress level and feelings of low self-worth. The literature affirms:

People who are in the middle of a transition process in a new career have three major problems regarding how they make sense of their situations. First, to understand their lack of success, they begin to devalue their personal skills and strengths. Second, they have a great deal of difficulty in giving themselves permission to experience the range of emotions associated with their situations, or to seek support from others to help ease their emotional reactions. Third, as the process continues, they lose sight of specific barriers that may be holding them back and live in a cloud of relatively undefined uncertainty and hopelessness. (Borgen, 1997, p. 134)

The academics were in my camp. I was uncertain and living in a cloud. This motion sickness was largely due to lack of structure in my learning. I was accustomed to learning frameworks and mountainous resources. Bricks and mortar of libraries, institutions and formal learning programmes. Much of my learning practice consisted of scavenging through the office for morsels: this was informal learning. Informal learning is gaining more recognition from scholars. There is, however, a discrepancy as to what exactly informal learning is, or isn’t.

Formal, non-formal and informal learning

There has been little empirical research into learning which does not take the form of institutionalized, accredited participation in formal education. There are sound methodological and philosophical reasons why the sociology of education usually emphasizes an individual’s formal rather than ‘real’ level of education. Informal education is set against non-formal education—organized educational activity outside formal systems, and formal education—the hierarchically structured, chronologically graded ‘education system.’ The distinction made is largely administrative. Formal education is linked with schools and training institutions, non-formal with community
groups and other organizations. Informal covers what is left, e.g., interactions with media, friends, family and work colleagues (Smith, 1999).

Eraut (1997) contends that if learning is defined as a 'change in person's capability or understanding,' then it can encompass informal 'background' learning at work without also including all changes in behaviour. Informal learning occurs as a process outside formal participation. It is, therefore, similar to the notion of non-formal learning described by Eraut et al. (1998) as not being constrained by prescribed frameworks. Informal learning, in my situation, was similar to non-taught learning as defined by Beinhart and Smith (1998): "deliberately trying to improve your knowledge about anything or teach yourself a skill without taking part in a taught course" (p. 20).

It is likely that a great deal of learning goes unnoticed in work by researchers and employers. Nonetheless, employers depend upon employees to learn informally. For example, few take courses on how to use the photocopier. Active informal learners engage in authentic forms of development in their work situations; organizations rely on informal learning to function (Gorard & Fevre, 1999).

Participation in informal learning is difficult to estimate accurately. Estimates indicate self-reported informal learning is extensive and has significantly increased in Canada in recent years (Livingstone, 1999). A survey done in 1998 by New Approaches for Lifelong Learning (NALL) found that virtually all Canadian adults participated in some form of explicit informal learning activity with the average time allocation of fifteen hours a week (Livingstone, 1999): "Adult learning resembles an iceberg in that the vast majority of it occurs informally and is generally unrecognized except by those who are doing it" (p. 169).
There are problems with arriving at a clear definition of informal learning. For example, McGiveney (1999) claims it is:

Learning that takes place outside a dedicated learning environment and which arises from the activities and interests of individuals and groups, but which may not be recognized as learning.

Non course-based learning activities (which might include discussion, talks or presentations, information, advice and guidance) provided or facilitated in response to expressed interests and needs by people from a range of sectors and organizations (health, housing, social service, education and training services, guidance services).

Planned and structured learning such as short courses organized in response to identified interests and needs but delivered in flexible and informal ways and in informal community. (p. 8)

Dale and Bell (1999) define informal learning somewhat more narrowly as learning which takes place in the work context, relates to an individual’s performance of her job and/or her employability, and which is not formally organized into a programme or curriculum by the employer. It may be recognized by different parties involved, and may or may not be specifically encouraged.

The central and defining feature of informal learning is context. Learning that takes place in educational institutions such as schools is seen as formal, and learning beyond school walls is ‘informal.’ Coombs and Ahmed (1974) used a similar distinction with regard to education. In their view, informal education was

...the lifelong process by which the individual acquires and accumulates knowledge, skills, attitudes and insights from daily experiences and exposure to the environment – at home, at work, at play: from the example and attitude of families and friends; from travel, reading newspapers and books; or by listening to the radio or viewing films or television. Generally informal education is unorganized, unsystemic and even unintentional at times, yet accounts for the great bulk of any person’s total lifetime learning – including that of a highly ‘schooled’ person. (p. 8)
Setting informal against non-formal education distinguishes several important points. Learning does not occur only in limited places, and education and learning are not synonymous.

Informal learning fits a key metaphor applied to education and the workforce, flexibility. Since capital and economies are integrated and globalized, flexibility is a goal for corporations and a means of maintaining and increasing economic competition. Informal learning is flexible because employees learn on their own time and pace. Learning is effective because it is relevant to situations. What is difficult, however, is drawing information when there is no well. One can ask for assistance at the photocopier, but not from a co-worker with a Do Not Disturb sign on his office door. Part of being flexible with regard to informal learning is knowing how to creep up on information sideways, keep to the shadows, lurk unrecognized, then pounce on unsuspecting prey.

Prospero had books for reference and years for savouring their wealth. Budgeting time in the contemporary workplace is different than time on the island—at least it was for me. Training dates were three weeks away and despite set objectives, content was still not there. This represented a gap in my knowledge—but not the only one. Like Miranda, I was naïve and ignorant to the ways of contemporary business practice.

Managing projects

Project Manager Rick was in charge of charts, tables and delegating. Meetings were constant: who was doing what and when. Although I knew when critical dates were approaching, I had yet to understand the power of negotiation. Deadlines,
deliveries and dates are integral parts of teaching, but teachers are not accustomed to submitting detailed reports on their accomplishments every two weeks. The expectations between business and teaching were different.

In eight years, I may have had three people come to my classroom to assess my teaching. Accountability came during reporting periods. If one's marks seemed off target or there was something amiss in the classroom, it would become apparent given time and word of mouth—especially in a boarding school. The element of trust in terms of what went on behind closed doors was huge. At the time, I didn't realize the amount of autonomy I had and the responsibility I exercised.

Project management was different. One had to keep track and document all decision-making. The original Training Strategy document was a starting point under which constant revisions would reflect updated changes. It made perfect sense. The architectural blueprint of my original plan would evolve and additions would be sent to Rick for approval. Whether he read them closely is debatable, but assuredly he would let me know when they were due. I was unsure as to his expectations, which perhaps explains why I let my first deliverable deadline pass without fuss—for three hours anyway—or until Rick called the office 5 pm Friday to say it had to be submitted by midnight. Imagine writing a 3000-word essay the night before it's due. Undergrad hell.

In retrospect I toiled over templates and aesthetics more so than content. My colleagues assumed I knew these high tech nuances. Effective learning necessitates questions and direction. I was doing neither. Luckily there was enough of a rapport with Rick and Tracy to ask for direction and let them know I was lost—or perhaps tempest-tossed.
This was a minor breakthrough and a major epiphany. Discord. It was okay to feel lost, stranded, and ask dumb questions. Survival meant asking for help and direction or else one risked getting voted off the island. Colleagues were accustomed to project work. They had seen projects, Go Live dates and technical trainers come and go. They knew the ropes. It was time for me to admit mortality and ask for assistance. I was a self-directed learner in dire need of direction.

Self-directed learning

Although learning on one's own or self-directed learning has been the primary mode of learning throughout the ages, systematic studies in this arena did not become prevalent until the 1970's and 1980's. Most work draws from humanistic philosophy, which posits personal growth as the goal of adult learning. The process of self-directed learning was first conceived as primarily linear, using much of the same language used to describe learning processes in formal settings (Knowles, 1970; Tough, 1971). Emphasis was placed on skills and competencies, learners needed to be self-directed in learning endeavours. As more complex models developed, emphasis began to shift to viewing the self-directed learning process as much more of a trial and error activity, with many loops and curves (Merriam & Caffarella, 1999).

Knowles (1975) defines self-directed learning as

...a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes. (p. 18)

Knowles' concept is based on 'andragogy,' from the combined form of the Greek word aner (meaning man) and agogus (meaning leader or to lead out). Andragogy is the art and
science of helping adults learn (Knowles, 1975, p. 19). This work is congruent with the radical ideology of individualism in the 1960's and 1970's and places tremendous emphasis on the self (Boshier, 1996). Scholars criticize the prominence of “self” as misleading, suggesting some adults may be ‘other-directed’; when they approach learning situations they may depend on a teacher (Jarvis, 1995). Knowles focused on something quite significant to adult learning. Nevertheless, his formulation is considered weak to some, not based upon extensive research findings, nor providing a complete picture of adult learning (Jarvis, 1995). Hartree (1984) writes that while Knowles has done an important service in popularizing the idea...it is unfortunate that he has done so in a form which, because it is intellectually dubious, is likely to lead to rejection by the very people it is important to convince. (p. 209)

Contributions and wisdom must be recognized and considered carefully. It seems the more prolific one’s theory and writing, the more likely it evokes criticism. Perhaps academic waters are as shark-infested as those in business?

*Speaking of sharks, there were many in our midst, ones quick to laugh, scare and smell blood in the office pool. Tracy, Rick and Tom were busy, but took time to help or laugh at me. We were becoming fast friends and fellow conspirators, sneaking peeks at each other’s real selves. I had learned it was better to ask questions before launching into any large task. In retrospect, the literature was right, work transition was stressful and it was important to recognize the toll it takes on emotions. Coming to terms with the fact I wasn’t coping well was paramount. I resolved to ask for help and delegate when something was clearly beyond me. Admitting weakness was a bottle to break in emergency situations.*
Further differences between project management and teaching high school centred on accountability. Teaching adults meant evaluation forms at the end of every session. This was new. Evaluation forms were grounding; they provided me, as instructor, a concise checklist of essential components for each training session. Some positive items were clear presentation, pace, explicit statement of goals and objectives, and chapter review. Hungering for structure and vain for instant feedback, I continually tried to outdo myself with each session. Evaluation forms helped me tailor my style and focus on key elements. Audiences favoured items related to clarity of presentation and comfortable atmosphere. The more laughs per session, the higher the evaluations.

**Formal training**

The next two items on my wish list did not present themselves immediately. They emerged after I was able to conquer the first two. Rescue for technological expertise came in the form of a three-day workshop. Serendipitously, I flipped to our software’s web site and discovered the company was holding a workshop in a neighbouring state. It was opportunity to experience formalized training. I would learn the software, secure a training manual full of exercises and templates and get some sun. I was interested in learning on two fronts: content and facilitation. I could conquer two of my knowledge gaps at once. I would learn about the software and the art of teaching adults. How would the instructor teach? How would he begin, monitor and facilitate the learning of the participants? Having never before been to a formal software workshop, this was going to be a quick study on how to orchestrate my own. It also provided opportunity to reflect upon my processes as a learner. Would a formal setting be more effective than previous informal learning?
There were eight of us taking the course on the 35th floor of the slick office building and Mike was our facilitator. I was able to pick his brain on a number of issues. Mike worked for a large high tech firm and flew around the country giving workshops. His background was in elementary education. I analyzed 'All Things Mike': his demeanour, intro, dynamics, pace and flow of material—all the logistics. I studied how he treated his audience: his style was professional and low key. I observed those three days from two perspectives, teacher and student. We took ten-minute coffee breaks every hour. Excessive at first, but much appreciated by day two. Mike, like any experienced teacher, was able to read the class well and recognized our glazed, antsy looks. I made mental notes.

By the third day, I was feeling comfortable with the software and how it was used. The two-day courses were unfolding. I was confident with the content and knew how it should be presented. It was all coming together. Mike's every nuance, short cut and pace provided breathing room. I was going to be okay.

My learning within the formal setting helped, but I am not sure it would have had such an impact had it not been prefaced by a great deal of informal learning. I knew what I wanted and needed to take away from the workshop: just-in-time learning. Had I gone to the workshop entirely fresh, most of the content and nuance would have been lost. I was what Knowles (1975) calls a problem-centred learner in need of relevant information. Knowles (1980) claims that most adults want to learn today and apply tomorrow. Most people in the workshop from all over the country had had the software at their work sites for over year. They had had a year to tinker and wanted to come to the workshop to confirm and heighten their understanding. Mike said that was normal. Most
came to his classes already knowing what they were talking about. We were problem-centred.

*I returned with insight. My instincts were right about how much content we needed to teach and Tom's suggestion to teach towards competencies rather than subjects was correct. I was also more comfortable with the idea of teaching adults, although I still hadn't given it that much thought at this point. Now that I had some confidence in my ability with the software and also had direction, I could honestly feel myself slipping into the training consultant role.*

**Writing Tech**

Technical writing was the third of my knowledge gaps. Writing training material made that readily apparent. Our manual was fashioned after one I had from the training course. It was simple, easy to follow and the exercises delicious. Fearful of breaking any copyright, the software manual became known around the office as "The Bible." The Bible was written and fine-tuned by professionals over a number of years. We had one week to come up with our Gutenberg. Tom, Tracy and I finished all one hundred pages and dashed to Kinko's two days before classes were scheduled to begin.

*I have often wondered about the perpetual busyness of Kinko's—this secret society of hobbits and bookbinders scurrying amid the din of photocopiers and fluorescent lights. I quickly became part of the tribe—or diatribe—necessary to cajole and bribe unwitting harbingers of the secret society. We needed our materials instantly! Apparently most in line were clamouring for similar assistance and we were not as special as we seemed.*
With binders complete and curriculum set, we were 'good to go' as they said in the office. Most text centred on exercises and cheat sheets. Cheat sheets were one page wonders: common computer tasks written in step-by-step procedures with graphics. This meant more technical writing, more templates, more frustration.

It takes a knack to phrase complicated convoluted technological material in everyday language. Sentences must be concise and succinct: content, simplistic and active. That was easy. Wrestling with templates, indexes, tables, tabs, charts, headers, footers and MS Word nuances (that still escape me) was tricky. It was embarrassing that, despite my background, I was ignorant of the ways of documentation.

In summary, there was much processing to be done during those precious months learning the ropes. Like any storm at sea, there were moments of frustration, hard work, and promise. Prior to landing on Project Island, I realized learning was not instantaneous—the Club of Rome was not built in a day. Admitting I was lost was acceptable. This allowed me to set boundaries and appreciate limitations. In doing so, I could capitalize on strengths and focus energy to proper channels. I learned to direct my sail. Formal learning settings coupled with informal set my compass in proper directions. My wish lists were partially behind and now I could focus on teaching—a touchstone. Act IV explores the final wish list item: teaching adults. It also tours the lighter side of Project Island through exploring the culture and lifestyle of fellow office castaways.
Act IV  Project Island

Now does my project gather to a head.
My charms crack not, my spirits obey, and Time
Goes upright with his carriage.

_The Tempest_ V.i.1-3

Act III centred primarily on my learning (and lack thereof) in three arenas. To concentrate solely on work-related material is misleading. Work on Project Island was not entirely toil and trouble; it was also full of energy, spark and laughter intermixed with frustration and hard work. Before launching further into tales of training, I’d like to talk about fellow castaways and culture.

_Gimme shelter_

_Friendship and teamwork were the most rewarding features of work on Project Island. Our office environment was antiseptic and temporary. Workstations were decorated as comfortably as possible, which for some meant mountains of coffee cups, water bottles, and fast food refuge. Transient and impersonal, neighbouring mice from the automotive shop were appreciative._

_I was in a large room with Rick and Tracy; it served as a meeting room and a coffee hub in which activity and conversation continuously brewed. Glaring fluorescent lights, white boards and hand written ‘Meeting Guidelines’ on large pieces of paper_
hung on the walls. HAVE FUN in block letters on each. Each desk was littered with handheld toys—stress balls, magic wands, plastic fuzzy devices designed to bring an air of “lightness.” Before summer’s end I was adept at taking a spongy squeeze toy, travelling at considerable velocity, off my head without flinch. Working ten to twelve hours in the same room with the same people day after day meant times of deserved refuge. Breaks took the form of interoffice catch, Frisbee and golf, and giddiness associated with uncontrollable crying and laughter. We were desperate to find humour in every nook. It seemed to retain sanity.

I made steadfast friendships. These “techies” were a breed unto themselves in terms of energy and social prowess: they worked and played long hours. Daily schedules consisted of twelve-hour workdays, dinners at 9, drinks till midnight. My ‘microserf’ colleagues lived for project work and got high on stress levels and Go Live dates. Rick was a junkie. He stationed himself by the central office phone three days before and after July 1st—yearning in his twelve-hour shifts for the phone to ring, a crisis to be had. His ill will only manifested itself once and was quickly remedied. The buzz lasted for days.

Others bragged about past deadlines: working through nights, sleeping in office makeshift cots. One system analyst had spent three New Year’s Eve’s in offices and cabs as Go Live dates were often January 1st. Stories about pizza boxes and Kraft singles slid under doorways, as well as castles of coke cans towering to ceilings confirmed Silicon stereotypes.

Aside from Frisbee and hurling sponge toys across workstations, an office favourite was ordering CD’s and Starbucks lattes from the Cosmos guy. We could order
selected poison from a web site and wait for the orange and green scooter to arrive usually within twenty minutes. We were good customers, but Cosmos soon tired when four of us unwittingly ordered the same CD within a two-hour time span. Someone starting timing him—the record was eight minutes.

Personal information was divulged as we grew comfortable. Rick was having an e-mail relationship with a woman he met at an Ultimate tournament. Ultimate is a friendly, competitive Frisbee game and a favourite for high tech types. It is a non-contact team sport that includes both genders. I would spend many coffee breaks outside the automotive shop perfecting “the flick”—a sidearm throw essential for smooth players.

The more familiar we became the worse our language grew. A “swear jar” was instituted and any indiscretion committed against the Queen’s English cost a dollar. Proudly, my contributions to the pot maximized at three dollars, whereas some were upwards of twenty. Funds went to a lively celebration at the end of the project.

The banquet scene

Prospero offers food and drink to test his courtiers and gauge the states of their morality. Not a bad idea. On many occasions, meetings for our team happened in bars and restaurants long after office doors closed. I was surprised by the gravity of several issues discussed in such atmospheres. After second rounds were ordered topic weightiness lightened and items such as teambuilding, projected futures and company prospects were discussed in idealized passion. Creativity and past experiences were shared. Most were in their late twenties, young, dynamic pistols with dreams of dot-com heaven. All had a wealth of project work experience, which unfortunately was rarely
discussed. Past lives and projected futures were inappropriate for diurnal meetings and work sessions. Candid, comfortable conversations helped us bond and learn from past experiences and projects. Reflections of past stressful situations helped immensely. This was informal learning. Social interaction helped us share information, validate project stress and build the team.

It was not all work talk. The cause for continual celebrations was unclear, but served a purpose. Rick had a maxim he'd picked up at an Ultimate tournament: two or till two. If you had two drinks, you could call it a mild evening and go home early. A third meant you were out until two in the morning with the likes of Stephano and Trinculo. The pressure was fierce and nightlife electric. A quick morning scan around the office was enough to guess who had “till two’d.” Telltale signs were vente sized Starbucks coffees and one-litre bottles of water. Entering the office with those big gulps meant hydration was an action item and the rest were smart to stay clear.

We didn’t socialize much with our other co-workers, the UBA's. They were older, had families and probably weren’t interested in our shenanigans. I envied them to some extent because they could go home and not talk about work. With our crew, work talk was non-stop and tiresome. Perhaps if I had more interest in high tech it would have been different. I missed my former colleagues at school and university, and the lively discussions about teaching issues, kids, great books, or current events. I felt stranded on a desert island.

Communication

Communication around the office occurred in many forms. There were hosts of meetings, necessary for decision-making, voicing concerns and formal interaction.
Meetings, however, meant ambitious action items to be completed before next meetings. With upwards of four per day, action items were precariously juggled. There were times during these formal moments of communication when I had questions for specific people, but didn’t think it the proper place to voice them. I was more apt to solicit information by less formal means; that’s how most of us operated since we were cognizant of not wasting each other’s time. The expedient way to communicate and solicit information was via e-mail. It was a quick and efficient method of asking direct questions and receiving quick response. Although we sat within a 20-foot radius, getting up and walking risked en route social chat or side-track. E-mail meant we could continue to work, put niceties aside and pinpoint issues. It was also courteous, causing fewer interruptions for both parties. If late responders grew tiresome, invariably you would pipe, “Did you get my email?” which was computerspeak for gentle nudge or sharp elbow.

Irrespective of shared office space, Rick, Tracy and I flung emails at each other in giggling abundance. It was a network of confirmed material, shared intimacy and laughs. Time was an issue and messages monitored schedules and streamlined information. We could finally pass notes in class without the teacher knowing. E-mail was central to our learning. We were connected, supported and nurtured. E-mail offered a space conducive to idea and information sharing where interaction was informal and flexible. We loved it.

Assessing the audience

Training was due to start and Ariel could be heard summoning thunder in distant clouds. We planned to train over two hundred people. Within that large group
there were a variety of learning styles, literacy and computer literacy levels. Some participants had to be more competent with the software than others prior to Go Live; hence, half-day, one-day and two-day courses were established. Most needed two-day courses and the mountain of material slated was immense. This was daunting and, in retrospect, I understand why UBA's were nervous. We were asking our audience to drop, adjust and rethink the way they had been doing their jobs for decades. Resentment was certain.

Like Prospero, I was stranding groups of people on foreign island coves with little sense of direction, purpose or reason. Bearings would be lost and confusion was certain in such discombobulating circumstances. Learning and adjustment would necessitate survival. Perhaps some of Prospero's island guests appreciated their newfound knowledge and insight and changed their ways, but others, such as Sebastian and Antonio, remained relatively unaffected. The final lines of Act V see them, unchanged non-learners, returning to Naples and Milan the same as they left: political double dealers and potentially murderous power seekers (Johnston, 1999). They reject learning: “Some people have an experience, think about it but reject the possibility of learning that could have accompanied the experience” (Jarvis, 1995, p. 72). Or perhaps they chose to ignore it: “For a variety of reasons people do not respond to a potential learning experience: perhaps because they are too busy to think about it or perhaps because they are fearful of its outcome” (Jarvis, 1995, p. 71).

As technical trainer, I needed to consider these issues along with potential computer anxiety and stress levels in the audience. Members in our audience were about to be introduced to computers for the first time.
High anxiety

Computers are an integral part of society; however, attitudes toward them are not entirely positive. Some accept computers as products of advancement; others express concern about their impact on lives. Introduction of computers has led to specific concerns about emotional reactions (Marcoulides, 1988). When first exposed, many respond enthusiastically while others have less pleasant experiences. These individuals exhibit anxiety when required to learn about using computers (Marcoulides, 1988). Computer anxiety is defined as complex emotional reactions evoked in individuals who interpret computers as personally threatening (Marcoulides & Mayes, 1995). I was nervous about technical training, but I hadn’t realized some of the participants might be too.

Researchers have been examining computer and user interactions for years (e.g., Calhoun, 1981; Marcoulides, 1988; Rosen, Sears, & Weil, 1993). In one of the first studies, Calhoun (1981) found introduction of computers to work environments caused job dissatisfaction among employees and evoked negative emotional feelings. In a study at a major aircraft corporation, Rosen (1993) found one third of staff employees computer-anxious following intensive computer workshops. If my workshops were too intensive, I risked alienating certain individuals. If individuals had experienced computer anxiety previously, chances were I would not eliminate but exacerbate problems (Rosen et al., 1993). I had to tread carefully considering scholars estimate up to one third of the population is affected (Marcoulides & Mayes, 1995).

In the 1980’s it was believed computer anxiety would become less of an issue as time went by. Younger generations would grow up using computers and statistically
significant negative correlations between prior experience and computer anxiety would be less widespread (Gos, 1996). This has not been the case. Computer anxiety is not entirely associated with lack of experience, but often more connected to quality of prior experiences (Gos, 1996). This puts pressure on instructors to do their best when teaching software applications. Computer instruction should be a positive experience for users.

Computer instruction had to be carefully executed. The axe we wielded contained information designed to provide long-term gain for the organization, but was coupled with razor-sharp angst. One employee had already quit on principle, refusing to buy into this computer and information revolution. Management was coercing workers to relearn and update skills.

Prospero made Caliban learn Italian. Whether this tutelage was in hopes of establishing lines of friendly communication or evolving effective master / slave relations, I am not sure. Relationships between power and knowledge cannot be ignored in either situation. Management was insisting workers attended training sessions. They had little say in the decision. Caliban also had little say in his forced tutorials. Knowledge and learning content were dictated in memos from above. Caliban’s anger causes him to direct his newfound knowledge, language and freedom against Prospero. How would my audience react?

Colleagues forewarned me to be wary of resentment from certain employees. I was worried about how to handle the animosity. Tom was too. Perhaps part of his tactic was to bring in the blond from Canada to serve as softened buffer. Would they harm the pale pink messenger with lilting accent? I would state categorically at the onset of each session that my role was simply to present software. I was Vanna on “Wheel of
Fortune,” winning the crowd by turning letters on axes to show messages hidden underneath. This was nothing one would read about in Harvard Business Review, and I doubt Tom would claim any responsibility for what is written here. But tacitly and tactically we navigated. We were consultants—welcomed or scorned—perfect scapegoats.

**Teaching adults**

It was time to teach. Ariel had created the storm and cast four parties astray on alternate parts of the island. Prospero had spent years in preparation; I had spent months. Magician robes were donned and the experiment officially began. What would be learned and by whom? What events would transpire? As Prospero had Ariel to assist, I had Wade, but his role was minor. My soliloquy would take place centre stage and hopefully I would not trip or forget my lines.

Classes took place in a slick downtown building, upscale from our dingy office space. I was instructor main with Wade to handle business-specific type questions. I was scared. The first day of teaching had a lengthy preamble; I didn’t sleep the night before. Exhausted, blurry eyed, I had rehearsed over and over my opening lines, visualizing my calm manner as I casually introduced myself to the audience, cup of coffee in hand, pretending I had done this a million times before.

The twelve-member audience ambled in, larger than expected. These were not teenagers; they were full-grown city workers in denim and plaid shirts, many looking and undoubtedly feeling misplaced in an office setting behind a computer. It was 7 am Monday morning and they were as tired as I was, rumpled and not thrilled about being stuck in a glossy office when work was piling up for them on other desks across the city.
I had to be “on” and not waste their time. I was responsible for making their precious hours fruitful and intimidated beyond belief.

Luckily, I had Wade on my side. He had been working with these individuals for years, knew them well and acted as a buffer. He may have been slightly nervous, but his cool Bruce Springsteen-like looks and demeanour suggested otherwise. There was no need to introduce him to the others. These were his friends and colleagues.

I began the session sputtering, face scarlet. I explained who I was, where the washrooms were and what the course of events would be for the next two days. I handed out binders and introduced the various sections and exercises, pointed out familiar icons on the computer screen and confirmed computer passwords. And then I did what many first-time teachers do in states of nervousness; I began reading from the workbook, asking the audience to follow along. I was scared to look up, voice crackling. My lack of sleep had deprived me of confidence; my hands began to tremble and my forehead bead. After months of preparation, I was crumbling. When I did look up, I was greeted with sympathetic eyes, eyes of those who know you are dying inside and writhe their hands in embarrassment for you. Some educational consultant.

And then my lengthy introduction was complete. It was time to dim lights, flip on computers and have the audience play with the software. Each participant had his own terminal and my computer screen projected to the front of the room. We began and I calmed. They were to follow along with the workbook. The first chapter was an introduction to navigating the software. Although all knew a fraction of what the software could do and why it was being implemented, not one had had the chance to play and learn how it worked. I did and I was teaching.
As we started into the curriculum, I relaxed. I had direction and felt grounded. Chapter objectives were clear and my job was to impart them as effectively as possible. I could do this. As their enthusiasm and questions sparked, so did mine. Despite how little I knew, they considered me an authority. They weren't going to ask complex questions about megabytes, databases and interface resolution; they wanted to know what the software was going to provide them, and they liked what they saw. My trepidation the night before was unfounded. My angst concerning computer anxiety minimized. These were ordinary people, with ordinary lives, spending another day learning at work. I could relax, breathe, and my face could return to its normal hue.

I would be foolish to pronounce the first training sessions entirely successful. I whipped through material too quickly, concentrated on using my examples rather than soliciting audience material and experience. I neglected to provide adequate time for review and was too conscious of myself. There were many questions to which I failed to respond adequately. Wade fielded many, but it was reassuring to know that if we didn't know the answer to a question posed, it was okay to admit it and vow to get back to the individual later. Our audience seemed appreciative. Since the project was in its first round of implementation, the expectation of uncertainty was implicit and not unwelcome. The fine-tuning of business process and software application could be curtailed towards specific needs of users. They seemed to enjoy the sense of ownership.

I fumbled my words, and grew scarlet on many occasions, but as the sessions progressed and I grew comfortable with my position, confidence escalated. My strengths came from pace, relaxed style of delivery and clarity of presentation. Mix that with a bit of humour, and workshops were successful. Tom insisted I make contact with
all participants and ask privately: “are you enjoying yourself—is the pace too fast, too slow?” He knew about computer anxiety and buffers. He also knew we needed a couple of instructors in the room on certain days to help with those who had little prior computer experience. It was exciting to watch learners click and trap their first mouse.

Humour was central to a relaxed atmosphere. Poking fun at each other and ourselves, Wade and I tried to establish a comfortable and non-threatening environment. We had usual shtick for each session, which featured my Canadianisms. Inadvertent ‘eh’s,’ references to the ‘washroom’ (which apparently is where one does laundry), plus the way in which I told time were delightfully foreign. And a mock suggestion that my way of speaking was correct in comparison to theirs was considered ridiculous. (Nationalistic banter was a source of guarded Canadian smugness in our office.) Laughter was a way to alleviate tension and resentment. Few teaching or consulting handbooks I’ve read tell instructors to use humour or make fun of themselves, but the most positive sessions with the best feedback were the ones with the most laughs. HAVE FUN at the bottom of the office guidelines was there for a reason.

This was teaching and it was fun. I had my share of stumbles and was quick to make light of them. I was comfortable presenting and delivering new material to an audience. This was a touchstone and source of comfort. These were specialized skills that separated me from office others. I was now an adult educator, but like many in the field, I knew little about what being an adult educator meant.

Rogers (1983) maintained teaching is an overrated activity, yet at the heart of the educational process. For Jarvis (1995), it is the provision of any situation in which learning occurs; teachers may be anyone who aids others to learn, irrespective of whether
they are part of an educational institution or intended learning to occur. Unintended teaching is considered teaching and failure to produce learning, even though it is intended, is not. Learning, teaching and intentions are not necessarily on the same blackboard and exist irrespective of each other. Importance rests in the relationship woven among the three. Learning is considered the significant element in education, with learners at the focal point. Adult education tends to emphasize learners and learning more than teachers and teaching (Jarvis, 1995). Adult teachers are treated as adjuncts to learning.

Approaches to teaching adults are well documented. As a schoolteacher, I was considered a “natural” to my high tech colleagues, but schoolteachers are not always the best people to teach adult learners since they are trained to “teach,” and teaching is only a small aspect of working with adults (Boshier, 1996). When teaching adults, teachers and learners need to structure the learning process together to ensure relevancy to precipitated learning needs (Jarvis, 1995). Freire (1970) writes:

the teacher-of-the-students and the students-of-the-teacher cease to exist and a new term emerges: teacher-student with students-teachers. The teacher is no longer merely one who teaches, but one who is himself taught in dialogue with the students...They become jointly responsible for a process in which all grow (p. 53)

Teachers adopt a variety of approaches to bring about learning: didactic, socratic or facilitative:

If teachers play their role in a didactic fashion, they expound the knowledge to be learned by the students; if they are socratic, they lead students towards a conclusion to their enquiry by shrewd questioning; if they are facilitative, they create conditions under which learning can occur but they do not seek to control its outcome. (Jarvis, 1995, p. 101)
Teaching methods for adult education should be socratic or facilitative rather than didactic (Jarvis, 1995). Rogers' (1983) concept of facilitation emphasizes relationships between learner and teacher:

We know...[that] learning rests not upon the teaching skills of the leader, not upon scholarly knowledge of the field, not upon curriculum planning, not upon use of audio visual aids, not upon the programmed learning used, not upon lectures and presentations, not upon an abundance of books, though each of these might one time or another be utilized as an important resource. No, the facilitation of significant learning rests upon attitudinal qualities that exist in the personal relationship between the facilitator and the learner. (p. 121)

He identifies three core qualities of a good facilitator: 1) genuineness in entering relationships with learners; 2) acceptance and trust in learner as person of worth; 3) empathy, or non-judgemental understanding, for the learner's perspective (Tennant & Pogson, 1995, p. 176).

Knowles (1980) emphasizes personal relationships between facilitators and learners. He suggests:

1) People are more open to learning when they are respected; 2) It is important for participants to be placed in a sharing relationship at the outset; 3) People learn more from those they trust than from those they mistrust, so it is important to establish a climate of mutual trust; 4) People learn better when they feel supported rather than judged or threatened; 5) A climate of openness and authenticity is also essential.

When people feel free to be open and natural, to say what they really think and feel, they are more likely to be willing to examine new ideas. (pp. 127-128)

Establishing effective relations is important, since they help illicit discussion and shared experience. This was central to the success of our workshops and integral to relationships Wade and I established with participants. My knowledge about the work and day-to-day business engagements of our audience was slim from the onset of training, whereas Wade was well versed. After a few weeks of training, we were able to elicit typical situations and scenarios from participants within which the software application would be used.
Audience participation and information served as content material and exercises. Experience and previous knowledge are important learning resources and should be used to help students integrate new knowledge with old (Darkenwald & Merriam, 1982). Learning then becomes and should be individualized and relevant (Jarvis, 1995).

Honouring adults’ experiences by making them the focus of study is a value proclaimed by most adult educators. Freire argued “we cannot educate if we don’t start—and I said start, and stay—at the levels in which the people perceive themselves, their relationships with others and with reality, because this is precisely what makes their knowledge” (Horton & Freire, 1990, p. 66). Wade and I were engaging in teaching practice that simply made sense: we wanted training to be relevant. This is a fundamental principle of teaching adults.

Teachers need to be empathetic and sensitive to learners (Jarvis, 1995). Prospero fails miserably with this tenet. Often teachers feel it is their responsibility to do all the talking and discipline learners who transgress or fail to follow projected plans. Caliban was disciplined through cramps, pinches and frightful spirits. Ferdinand was forced into slavery. Corporal punishment was part of lesson plans, which some suggest was part of a pedagogical discipline accepted in England at the time, as well as in the not so distant past (Carey-Webb, 1999). Prospero’s action towards other “students” on the island may raise ethical eyebrows in contemporary society. Teachers should not regard themselves as ‘all knowing,’ but attempt to create and facilitate learning and engagement among all participants (Jarvis, 1995).
Environments for teaching adults should be comfortable, non-threatening and conducive to learning; teachers should foster feelings of confidence and self-esteem in students. Kidd’s (1973) creed provides guidance:

- Thou shalt never try to make another human being exactly like thyself; one is enough.
- Thou shalt never judge a person’s need, or refuse your consideration, solely because of the trouble he causes.
- Thou shalt not blame heredity nor the environment in general; people can surmount their environment.
- Thou shalt never give a person up as hopeless or cast him out.
- Thou shalt try to help everyone become, on the one hand, sensitive and compassionate and also tough minded.
- Thou shalt not steal from any person his rightful responsibilities for determining his own conduct and the consequences thereof.
- Thou shalt honour anyone engaged in the pursuit of learning and serve well and extend the discipline of knowledge and skill about learning which is our common heritage.
- Thou shalt have no universal remedies nor expect miracles.
- Thou shalt cherish a sense of humour which may save you from becoming shocked, depressed or complacent.
- Thou shalt remember the sacredness and dignity of thy calling and at the same time, ‘thou shalt not take thyself too damned seriously.’ (pp. 306-307)

Prospero would receive a failing grade on most of the decree, especially parts about expected miracles and universal remedies. I was guilty on several bases, but safe on the final two. Cherishing a sense of humour and not taking myself too seriously were key to success.

**High school versus Kidd stuff**

Significant ideas for adult education evolved from children’s education (Jarvis, 1995). Dewey (1916) believed humans are born with unlimited potential for growth and development, and education is one of the agencies that facilitate growth. He stressed
continuity of experience and interaction between young and old are both important to learning. Experience is at the heart of human living and because continuity of experience leads to growth and maturity, genuine education must come through experience. Teachers’ roles are to provide the right type of experience through which learners may acquire knowledge and understanding and this facilitates the process of growth and development (Jarvis, 1995).

Freire emphasized that teachers must reach out to learners and learn from them in order to be able to contribute effectively to teaching and learning processes (Jarvis, 1995). Knowles (1975) also talked about transactions between teaching and learning. He attempted to explain the phenomenon by stressing two polar extremes of teacher behaviour: learner-centred and teacher-centred. His andragogical model or learner-centred model is widely embraced. A reason for this is Knowles’s stress on the importance of real-world experience in distinguishing adult from pre-adult learners or, as he terms, orientation to learning (Knowles, 1975).

Specific to the teaching/learning transaction is what one believes about adult learners and the nature of learning. How instructors teach, what they teach, and ways they interact with students are influenced by views on the nature of adults as learners. I had no experience dealing with adult learners aside from being one myself. Literature makes a strong case for viewing adult learners as different from children:

Adults are not merely tall children. They differ from the young in many ways that influence their learning. They have different body characteristics, different learning histories, different reaction times, different attitudes, values, interests, motivations and personalities. Therefore, those who are trying to help adults learn must be aware of these differences and adjust teaching and the learning environments accordingly. (Apps, 1979, p. 168)
My experience was teaching children. A child is dependent on others, while adults have hopefully assumed responsibility for managing their own lives. The difference does not entirely rest on chronological age; social roles characteristic of adulthood differentiate adults from children (Merriam & Caffarella, 1991).

Bruner (1968) recognized human beings are natural learners and schools often fail to "enlist the natural energies that sustain spontaneous learning" (p. 127). A child's life is bound by home and school, whereas an adult's is defined primarily by work and community. The main purpose of both home and school is to teach young people how to function as adults. Educative curriculum in both settings is set primarily by others who decide what is important to know in order to become responsible members of society (Merriam & Caffarella, 1991).

Adults versus children

The differences between teaching adults and children are multiple. Issues involving experience, development and motivation differentiate participation in learning activities. Richer life experience is cited as a key factor. Kidd (1973) notes that "adults have more experiences, adults have different kinds of experiences, and adult experiences are organized differently (p. 46).

Experience is a "given" assumption in the literature of adult learning (Brookfield, 1984). Knowles (1975) conceives it as a reservoir of experience, a rich resource that helps foster identity. Engagement of past experiences with learning is different for adults than children. This may involve obstacles to new learning, such as negative attitudes, old
ways of doing things, prejudicial views (Merriam & Caffarella, 1991). In Caliban's case it is an association with physical pain.

With regard to development, both adults and children are involved in developmental processes; however, the nature of the processes is qualitatively different. Havighurst's developmental tasks for different life stages (1972) suggest that in infancy through adolescence, developmental tasks reflect physical maturation or preparatory activities needed for future adult roles. Beginning with the tasks of young adulthood, there is a shift to functioning well as an adult—bringing up young children, managing a home, achieving adult civic and social responsibilities, and so on. Erikson's life stages also reflect a shift from childhood dependency to adult-oriented dilemmas. In the first five stages of infancy, the child deals with establishing trust, autonomy, initiative, industry, and identity. Adults struggle with intimacy, generativity, and integrity, characteristics manifested in adult roles of spouse, parent, worker and citizen (Merriam & Caffarella, 1991).

Life events and transitions between roles differentiate adult from child learning. Many of these events and transitions are peculiar to adulthood and require adjustments through systematic learning activity. Values and attitudes are also crucial factors. Experiences, nature of experiences, developmental issues, motivation to participate all differentiate adult learners from children. Different learning styles beg different teaching methods. For an experienced teacher of children, it means altering one's role. Teaching children is preparing them for the responsibilities of adulthood. Adults are already adults. They've achieved that role in society and the teacher is no longer there to "shape young minds" or fill Locke's blank slate.
Adult educators

What skills are necessary in order to be an adult educator? Or more importantly, What is an adult educator? An adult educator is a social role performed by adult members of society. This role directly and/or indirectly yields social and financial consequences and constitutes a major focus in the life of an adult (Jarvis, 1995). This definition contains four basic components: a social role, social consequences, remuneration and a major life focus. Varying roles of adult educators are diverse. There are significantly more adult educators in most countries than primary, secondary or university teachers but, because the field lacks conspicuous edifices and largely occurs in non-formal settings, it is difficult to know how to unify or provide training for interested parties (Boshier, 1996).

Houle (1970) described a pyramid of leadership within the field of adult education. At the broadest level or base are the lay leaders in community settings who are essentially volunteers. At the next level are those for whom adult education is a part of, but not central to their jobs. And at the top are professional full-time adult educators, who although not necessarily trained, focus on adult education as their career. Houle has not tried to count how many educators fit into the three levels; however, the pyramid has heuristic value and shows that any training given will have to fit the circumstances under which people work. Since Houle described adult education in this way, the number in the apex of the pyramid is greatly expanded and is probably now shaped more like a rhombus (Boshier, 1996).

Houle (1970) noted there are few clear career paths for adult educators. Tiers of the pyramid differ in terms of involvement; distinctions are fluid and status changes.
Prospero and I were not likely to consider ourselves adult educators or identify with a larger field or pyramid. Our situations felt unique; consequently, it didn’t seem right to package and label our pursuits and positions. But perhaps those feelings of “nebulousness” aptly describe many in the field of adult education.

Full-time adult educators perform a multitude roles. Newman (1979) characterized them as:

- Entrepreneurs – they have to establish courses and then ensure that there are sufficient students to make them viable;
- Wheeler-dealers – they have to overcome all the problems of entrepreneurs employed in a bureaucratic education service;
- Administrators – they are responsible for planning programmes and employing staff;
- Managers – their job is to manage the part-time staff and the educational premises;
- Animators – they have to make things happen;
- Trouble-shooters – they have to deal with the multitude of problems that complex organisations like adult education institutes create;
- Experts on method – they might be called upon to provide guidance and assistance to part-time adult education staff;
- Campaigners – since adult education, as a marginal branch of education, is always under threat. (cited in Jarvis, 1995, pp. 166-167)

But where does teaching fit? Preparing for and teaching in institutionalized settings has a clear path, whereas most adult education has not yet developed a direct career route from initial training to work as an adult educator (Jarvis, 1995). This has had certain repercussions on the age structures of the occupational group. Verner (1964), in citing a study, states:

Individuals enter the field of adult education relatively late in their careers. Brunner found the medium age to be 35.5 years. Furthermore, 23 percent did not enter the field until they were forty-two or older, although some 34 percent of the membership of AEA (Adult Education Association) were employed in the field by the age of thirty-one. Thus, adult education tends to recruit its leadership from other
fields at the midpoint in the individual’s career rather than gaining its membership directly out of college. (p. 45)

My age fit into Verner’s mean perfectly. Professionals generally expect adult educators to have a number of years’ experience prior to entering; hence, many tend not to commence their teaching careers until they are older (Jarvis, 1995).

Debate surrounds how and if the field of adult education should be structured.

What do adult educators need to know? Central to debate is failure of adult education to develop a coherent concept of the field that transcends development of skills, while still retaining some emphasis. In American graduate programs there is some consensus:

The Commission of Professors of Adult Education recommends that on the master’s level, students should be introduced to the fundamental nature, function and scope of adult education. They should also learn about adult development and learning; program planning processes; historical, philosophical and sociological foundations of the field, and receive an overview of educational research. (Rose, 1998, p. 5)

Other professionals prefer less generic guidelines. For adult educators who are full-timers, part-timers or spare-timers (Jarvis, 1995), Brookfield (1993) offers: “be clear about the purpose of your teaching...reflect on your own learning...be wary of standardized models and approaches...expect ambiguity...[and] recognize the emotionality” of learning (p. 210). He goes on to say that teaching expertise is devoid of context: “What is effective in one context, with one student or group of students, of for one purpose may be severely dysfunctional in another context, with different people, or for another purpose” (pp. 192-193). He finishes by suggesting we should ignore everything he says (Jarvis, 1995).

Issues regarding training of adult educators have led to problems with adult education programs at universities. While programs have grown, there has not been a
concomitant growth in respect for the field as a whole. In fact, some suggest adult education is becoming ever narrower and more marginalized (Boshier, 1996). Part of the problem lies in the failure to conceptualize adequately the field and to define what makes an effective practitioner. Many people interested in becoming involved in the profession of adult education may easily enter and pursue and have quite rewarding careers in the field. But how many people, like me, become adult educators and do not know it? How important is it for individuals involved to become aware of the field?

Carlson (1977) and others have reservations about training adult educators and are committed to advancing the cause of the gifted amateur (Boshier, 1996). They question whose interests will be served if training is systemized. Conversely, since adult education is probably the best instrument to help solve society's pressing problems, and adults must keep learning, it makes sense to have a vibrant and properly staffed field of adult educators (Boshier, 1996). It is inappropriate to assume all amateurs know how to teach effectively or embrace Knowles (1980) notion of andragogy.

Houle (1960) listed six attributes of an outstanding adult educator:

- A sound philosophical conception of adult education based on a consideration of its major aims and issues.
- An understanding of the psychological and social foundations on which all education (particularly adult education) rests.
- An understanding of the development, scope and complexity of the specific agency or program in which she works and the broad field of which she is a part.
- An ability to undertake and direct the basic processes of adult education.
- Personal effectiveness and leadership in working with other individuals, with groups and the general public.
- A constant concern with the continuance of education throughout life.
It is hard to know if there are generic issues within the field applicable to many different situations, especially when facilitation and experience will differ with each group. Many worry about the extent to which a singular approach to training will stagnate what ought to be a dynamic field.

Cervero (1991) claimed adult educators should:

- Develop a common understanding of the function, values and philosophies of the field and continually review and discuss these.
- Develop an understanding and ability to use the knowledge base of adult education to solve practical problems in our work.
- Develop a collective identity with other adult educators.

The challenge of meeting the above goals through training is doing so in ways that avoid regulatory and exclusionary aspects of professionalism (Merriam & Caffarella, 1991).

Cervero (1992) has suggested a model of professionalization based on six values:

- Adult educators are not values-neutral possessors of a technical process;
- Adult educators must recognise that problems involving learning are contextual;
- Most adult learners do not need assistance;
- Learners need to be involved in decision making;
- Learning needs should not be seen as deficiencies;
- Educators have a symbiotic or two-way relationship with learners, which can lead to an exploitation of learners, something to be avoided at all costs.

Expanding curriculum can dilute notions of what adult education means, yet there seems to be agreement on several issues, particularly related to relationships between educators and students.

*Relationships were key to our success. When teaching, I found few differences teaching new material to adults as compared to children. Pace, flow and interaction*
seemed monitored by instinct. This was teaching adults, however, and it was much more pleasant, relaxed and 'civilized.' The biggest challenge was juggling diverse learning levels, slowing the pace enough so that everyone could follow and be involved, yet not going too slowly and boring others. Regardless of the age of participants, a teacher can tell when she's lost her audience—when it's time for a "biobreak" or to pack it in for the day.

Days spent teaching were my best on Project Island and nearing my last. After three weeks of solid training, my contract was up, my revels ended. Like the island clan, Ariel had summoned a ship to return home. Lessons had been exacted, lives altered. I was leaving a changed person: I had learned a new trade and made friends and contact with over two hundred people in four months. Not bad for a schoolteacher from a neighbouring island.

My time on Project Island provided me with a wealth of experience and knowledge. I was now privy to the world of high tech industry, its meaning, purpose and players. My colleagues made work tolerable, at times enjoyable. But with training sessions over, much like the final English class in June, I was happy to say goodbye, and to head home.

Act IV has described people, culture and the atmosphere of my work environment, and touched on salient features of adult education. Act V is the finale, where Prospero discards his robe and confronts those around him with imperial justice. My plans are not as grandiose—they are to revisit central issues and themes pertinent to this thesis.
Act V Into thin air...

Our revels are now ended. These our actors,
As I foretold you, were all spirits and
Are melted into air, into thin air;

The Tempest, IV.i.148-150

Shakespeare's plays have five acts and thus does mine. Final acts usually redress major themes and tie unravelled ends and I will endeavour to do the same. A year has passed since my return from Project Island and things have changed a great deal. The members of the project rarely travel around the Pacific Northwest anymore. Rick married the woman he was having an e-mail relationship with and the happy couple are captains of the Ultimate team we all play for. I have mastered the flick and continue to learn the game. We "Have Fun," just as the meeting guidelines suggested.

I still work for Tom's company occasionally. I have helped put together technical writing and marketing material, co-wrote content for the company web site, and it appears there are more technical training contracts coming shortly. I am not sure if continued work in these areas constitutes an ultimate career goal, but have decided to continue to work in high tech for a while. And I am no longer scared. I know how to handle myself and ask the right questions. I know how to tackle project management issues and think ahead as to what those pertinent issues might be. Realistically,
however, I will undoubtedly get bored quickly and look for my next career shift.

Confessions of a protean worker.

I have started to send my resumes out to other firms, knowing there is a demand in the job market for corporate trainers and adult educators. I have learned a substantial amount in the field and would like to learn more. Tom has too. My reading, conversations and research have probed him to move his company into directions focused towards community improvement, knowledge management and organizational learning. Senge (1990), Drucker (1991), and Botkin (1999) are as common to our conversations as coffee.

To prepare myself for continued work as an educational consultant, and in an attempt to redress my lack of skills in key subject areas that arose during my work at Project Island, I have continued to tackle several knowledge gaps discussed throughout this thesis. I have vowed never to allow subject areas of software content, project management, teaching adults, and technical writing plague me again. I decided that if I am to pursue further a career in high tech, it might make sense to join the "educational arms race," and stockpile more skills in these areas. As a result, I have taken three adult education courses over the past six months. Being an educated, professional, white Canadian woman, the probability of my participation in these endeavours is high (Livingstone, 1999).

The first course I took was in technical writing and editing, the second was in project management, and the third was a workshop on publishing technical material. Two were run as part of continuing education courses through two universities, the other through the local school board. There were few new concepts learned from the
three, aside from a few templates and several “how-to” checklists for project management. Given my work experience, course content and learning objectives served as a source of review. It was affirmation that knowledge acquired during the prior six formidable months was achieved largely through informal means. In retrospect it was validation that what I had learned and experienced was legitimate. Perhaps a remnant glimpse of my bias towards formalized education peeking through. I have been made to re-evaluate my biases towards formalized education and credentialing, and have grown to appreciate that learning outside organized settings is as valid as learning within.

I knew what it felt like to be in the trenches and work through many of the issues discussed in class. I could reflect upon and relate to key points made, and extrapolate clear examples for each salient issue. Extrapolation made my palms sweat and head spin momentarily, but there was no longer fear involved. I was in a different place now, and I don’t mean the fact I was physically crammed into a high school student’s desk at 7 pm on a Wednesday night. I was in a different place with respect to my learning behaviour, my understanding of what constituted legitimate learning, and how much I had learned during the course of a year.

My shift in career demanded a great deal of energy. It was the first time I felt entirely responsible for defining what and how I needed to learn, and then set out to do so without someone supervising and monitoring progress. Although Rick monitored my progress to an extent, he was not responsible for my learning, only my performance. And perhaps that is a key difference between learning in the workplace as opposed to graduate school. In graduate school, learning seemed more like a journey. It was supported and gently guided. Workplace learning was a storm where I had to sink or
tread water; it felt as though no one cared about my journey because the outcome preceded the process.

If I could streamline my learning processes during the previous summer, bottle them, and come up with the best formula possible, profits would be mine. Or so it would seem to many e-learning companies. But is there one winning formula? I think not. Learning needs and processes are individualized and personal (Jarvis, 1995). There is no single tonic for the training thirsts of big business. And since job markets in the new economy have become increasingly globalized, flexible and competitive, workers are attempting to improve skills at every turn (Hall & Mirvis, 1995). Corporate rhetoric demands it. Jogging alongside trends and technologies, education is essential and the topic of discussion for many organizations. My fresh theoretical understanding of the educational needs of business has resulted in increased awareness. Just as one starts to notice the colour of houses as soon as she wants to paint her own, I have started to become aware of information related to education and business that surrounds us.

The longest weekend

To round out the revels of this learning journey, I am going to focus on a specific weekend during which my past met my present and most of what I learned in between was at the forefront. The weekend occurred on the one-year anniversary of my departure to Project Island. I had been working on the final draft of my thesis and wondering what was going to come next.

A month prior, Tom alerted me to a conference taking place at a nearby major ski resort over the long weekend. Research at the conference web site confirmed topics of discussion would involve e-learning and knowledge management. Registration, a
mere two thousand dollars, was beyond my student means, but the company sponsoring events intrigued me. They were an educational consulting firm specializing in instructional design and corporate training. Never scared of pressing "attachment," I e-mailed them my resume.

The company responded with a perfunctory: "Thank you, we are not looking for anyone right now," which translated means, "Bugger off," but my inroad had been made. My e-mail address was on their list serve. When I checked my e-mail mid-week prior to the long weekend, there was little on my mind aside from a morning cup of Italian roast. The company had sent me a note—a last minute reminder that the conference was starting tomorrow. And as I scrolled I saw a sentence that would catch the eye of any discerning university student: "We are willing to subsidize students to attend the conference free of charge."

Fast as I could press "Enter," I jotted a note explaining my thesis topic, areas of interest, and telephone number. Within minutes, the call came and I was about to attend the conference free of charge. Once again, I was just-in-time, packing my bags, and up to the ski resort. For a second time I felt like an impostor or outsider to the sleek corporates flying in from around the world to partake in this globalized affair. I was slipping in the backdoor amidst experienced others, but this time, I knew what I would be learning. Having completed my research and theoretical review, I was interested in hearing what these corporates had to say about e-learning and knowledge management. Would they wax poetic and buzz the buzzwords? Would any post-modernist, pro-liberal arts arguments be made? It would be a test of my knowledge. How far had I come in my
understanding of these fields? Second, was I truly interested in pursuing and furthering my career in these areas?

I had been to this ski resort before on several occasions and, coincidentally, all previous times were on this particular weekend for the same reason—the graduation dinner/dance of my former boarding school. Many wonder why a smaller school would opt for such a decadent location for a high school gala. My response is that the opulence of the setting sums up the occasion precisely. The grad ball is held each year at the conference centre and since many students have parents who live in major centres across North America, it is easiest to host the ball here—plenty of space, hotels and access to airports.

It was opportunistic to be going there at the same time. It was a chance to see my former colleagues and friends, an opportunity to make further assessments about what I had learned and where I wanted to go in my career path. Did I belong at the conference with the corporates, or with my teaching colleagues? I packed a just-in-time black tie outfit just-in-case. I would “crash” the school party.

It felt great to drive the sea to ski highway with heady questions lurking in my mind. The “alternative” CD a colleague had “burned” for me lurched in tune with the windy roads. I would arrive at my hotel, get organized, registered and proceed to the conference centre to camp myself in the small theatre for the day and listen to conference speakers. I was excited at the prospect of relating to the world of business once again. I had been researching for sometime, studying topics on the other side of the magnifying glass. Now I would be stepping through the lens and participating in events.
My research had forced me to re-evaluate my concept of the contemporary workplace and work in high tech. Previously, I had felt a certain amount of awe with respect to the worlds of business and high tech, and the fast-paced change associated with both. High tech seemed sexy, slick, and the wave of the working future, but my experience proved wrong. There was nothing sexy at all. There was hype, but how glamorous was sitting in front of a computer screen for 12 hours, heading out for $26 steaks, drinking till two in the morning, and repeating times six? The appeal wore off quickly.

And the work was not terribly dynamic; definitely less intoxicating than the nights out. There were times I worried incessantly about not understanding the content or capabilities of the software that I would teach. Once knowledge was secured, I was confident. Teaching adults was the most dynamic arena of my experience, although trial by error. Reflecting upon literature afterwards, I had not done too badly. If I were to teach adults again, I would allow more room for input and discussion around the audiences’ experiences and focus less on myself. I would concentrate on soliciting their ideas and input.

The conference

The first day conference proved interesting. There were not as many people as expected, but there were a multitude of presenters and a mixed audience. From what I could discern, the audience was global. There were educators from Germany, high tech workers from South Africa, business executives from California and policy analysts from Ottawa. It was a diverse audience, albeit not a polite one. Some let their cell phones ring during slide shows, others asked biting questions of the presenters and one
venture capitalist announced that private monies vested in public education was
unworthy from an investment point of view.

I sat through the first day of lectures and panels, took notes and listened
thoughtfully to discussion. I understood what the presenters were stating. I understood
their concepts of knowledge management and could follow their charts depicting
information flow within knowledge repositories. One gentleman from Princeton
showcased e-learning software currently being used in several major American
universities. Here it was, the technological hype, buzz, contemporary thirst for
corporate training and education right on centre stage, and members of the audience
drinking every word. Well, maybe not all of them were. I know I wasn’t.

In between listening and jotting notes, I started to form questions in the margins
of my notebook. And I wrote the same question during the course of almost every
presenter: Will someone mention the principles of adult learning? Will someone
mention the role of the adult educator? There was a fundamental gap. Despite this
being a conference on e-learning and knowledge management, education principles
were ignored. Were they implicit? I think not. The aim of most presenters was to present
a winning solution: the best way to teach people on the largest scale the greatest
amount of information with as little effort as possible in order to maximize profit. A
topical salve for the masses, while not understanding what the salve was treating.

My initial response was one of horror. Did these professionals not understand the
significance and harm of demanding workers to learn by methods and modes perhaps
ill-suited to many? Did they understand the power of setting curriculum and associated
issues of knowledge and power? I had been struggling with these issues for a year and
I didn't believe the hype. I wasn't the charlatan or the impostor; they were, marauding learning and education as a way to make money. I was disgusted.

Alternately, I was elated. In the brief meta-analysis that ensued, I realized I had reached a new level of understanding within this subject area. I could sit and listen attentively, understand and be interested in all that was said, yet at the same time, question everything. I was knowledgeable in this field, knowledgeable enough to know what questions to ask, dissect flimsy information and data, and detect corporate rhetoric. I was experiencing my own issues of power and knowledge in the sense that I could recognize the insidiousness of what I was hearing.

And I wondered about Miranda and how long it would take her, once back in Milan, to recognize the insidiousness around her, the political underhandedness that lurked within her father's dukedom. Would her secondary experience from Prospero provide her with the information necessary to recognize what she had heard about? Mine did. And Prospero, who seems to be intent on his grave before departing from the island—will he find life in Italian court unchanged? Will he be savvy to the political and economic rhetoric rather than ignore it completely as he did years ago? There were levels of awakening among the three of us.

The revels

Much like Miranda and Prospero returning to Italian court, I had my chance to return to the bustle and fanfare of my former court, the boarding school. Luckily, during the first lunch break of the conference I bumped into a former colleague who just happened to be the sole individual responsible for organizing the school's graduation dinner. Upon spotting me in the parking lot, she called and waved. Amid
hugs and exclamations of surprise, she promptly invited me to the evening’s events. My just-in-time black tie outfit was a worthy last minute pack.

When working eight years at one institution, one makes solid relationships, especially if one works and lives with others in close quarters. My former colleagues had been more than co-workers at boarding school; they were friends and like family. After two years, I was elated at the prospect of being in their midst again. Former grade 10 students that I had taught, coached and tucked into bed at night were finally graduating.

I spent the evening enjoying a lovely meal, chatting to friends and students, and dancing till midnight. When colleagues asked what I was doing and where my career was going, I was proud to tell them my master’s thesis was almost complete, and that I had started work as an education consultant in high tech. Mild looks of confusion crossed their faces and with slight nods, they’d respond: “Oh yeah, good for you. What does that mean?” I guess it meant as much to them as it did to me the first time Tom had introduced me to my new line of employment. After a brief explanation, the question was the same: “Will you go back to teaching?”

This question has vexed me since I left the school years previous. Would I go back? I looked around the ballroom at smiles on graduates’ faces, proud looks of their parents, and end-of-May weary expressions on teaching colleagues. Did I miss this? Yes. But could I go back? No. I felt beyond the school. In one year I had digested more information and pushed my capacity to learn in directions I had never before experienced when teaching high school. Although my learning journey and ability to endure the subsequent stormy seas had left me weathered, I was equally willing to
continue forward and pursue something new. I couldn't go back because there was
nothing new there for me. My passion was no longer teaching; it was learning. I had
graduated too.

So there I was, dismissing the corporates and bored with the prospect of
returning to teaching. My next excitement and learning journey looms ahead. Most
likely it will be with corporates, wrestling with principles of adult education. Knowing
what I do about content, curriculum and theoretical perspectives, I might be able to find
my niche. For me, experience begets confidence. And that was the hardest part about
shifting careers in today's job market, building experience so that I would feel
confident. I have much more to learn and hope to garner more practical experience,
especially given the amount of reading completed on the issues. Secondary experience
is second to firsthand experiential learning. I will try to keep my feet wet.

I only went to part of the conference the next day. I had heard enough on the first
and the remaining agenda was focused towards economic issues, unrelated to my
themes. I spent the rest of the weekend chumming with friends. Tom came up one
evening for dinner and we talked strategy. He's heading his company into the direction
of e-learning and knowledge management. I warned him over dinner about the buzz and
hype of the industry, how learning on the Internet sounds glamorous but little can
replace the effectiveness of a good facilitator and interactivity. High tech companies
are apt to call moving pictures that one clicks as interactivity, but it's not the same as
people interacting with one another.

I also warned him about how curriculum developed for e-learning corporate
courses may be suspect, since who really knows who is setting the objectives? He
calmly told me that I would be setting objectives for courses and that he was confident in my ability. This proved my point. Any "Joe" or in my case, "Jill," can be responsible for setting and prioritizing, and Tom, bless him, means the very best. He has little idea (or care) about the enormity of what he is proposes.

**Job descriptions**

Each weekend I scan the careers section of newspapers for the perfect job description. I am not entirely sure what I am looking for, but find the exercise of searching for my newfound skills within the current needs of business reassuring. Before I define my next role, it might be wise to redefine my former and to form a checklist of skills that were necessary for successful education consulting and technical training. If I were to place an advertisement for employment that outlined my experiences and skills of the previous year, it might look something like this:

**Table 1**

**Job Description for Education Consultant**

<table>
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<tr>
<th>Required: Education consultant for high tech implementation project. Will be responsible for technical training and instructional design. Duties include teaching and designing educational material, assembling information, organizing and writing instruction manual. Will teach material to large audience and 'train-the-trainer.'</th>
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<td><strong>The successful Applicant has</strong></td>
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This advertisement summarizes the ingredients, and toil and trouble of my career shift. It reflects skills necessary for a successful education consultant and combines basics of adult education with those of a technical nature, while mixing in human elements. It summarizes what I have learned.

But am I the only character in this story with the only experiment? Perhaps when Prospero returns to Milan he will scour daily publications in search of his next venture. Now that he has experience in manipulating individuals along with weather patterns, he might apply his skills elsewhere. If he were to outline the perfect job advertisement for his role in The Tempest, it might look like this.

Table 2

**Job Description for Island Experiment**

<table>
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<th>Required: Magician and philosopher for judicious island experiment. Will be responsible for teaching, tutoring and passing justice to all concerned, assembling storms, banquets, engagements and instructing spirits. Will teach material to captive audiences.</th>
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Prospero and I both were subject to experiments, but his was more self-serving than mine and on a larger scale. Learning was central to both experiences. As we look back
on past accomplishments and venture towards future careers, it is difficult to know what further journeys lie ahead.

**Our revels are now ending**

*We are such stuff*

*As dreams are made on, and our little life*

*Is rounded with a sleep.*

_The Tempest_ IV.i.156-158

_I have likened myself to Miranda and Prospero throughout this journey. I shared Miranda’s wide-eyed innocence with regard to the Brave New World. I’ve shared Prospero’s role as teacher and fellow exiled castaway. As we three head home, Miranda and I are filled with delightful prospects of the future. Prospero is less cheery; he tells us that upon returning his every third thought will be on his grave. Perhaps his job advertisement is outdated._

_Journey’s end is bittersweet. This narrative has chronicled a storm that threw me off course and through uncharted waters. The storm challenged me personally and professionally to think, react and reflect on a multitude of ideas and possibilities. Weathered wrinkles attest to stresses along the way._

_This thesis is atypical, but perhaps informal practices beget informal means._

_Did we expect Prospero in his judgement to be just and wise? Narrative as research is my method of judgement—the magic wand I leave behind at the end of the fifth act. Like Prospero, I abandon all mention of tempest, thus suggesting the journey started in rough waters has been completed and led to absolute calm. Reserved grace, it is foolhardy to suggest my musing and askew font faintly resemble the complexity and_
magnitude of Prospero's greatness. I admire his intellect, rare spiritual powers and moreover, his sage and virtuous conduct. I have learned from Prospero. He made sacrifices as an academic and never deserted the power of imagination and learning.

Dreams may be the stuff of life; they may energize, delight, educate, and reconcile, but life is not lived as a dream. It is possible to learn in worlds of illusion and take away knowledge and understanding. Perhaps this enlightenment helped.
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